AN HONEST DOLLAR

E. BENJ ANDREWS

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(THIRD EDITION)

WITH A CHAPTER ON

"THE FALL OF PRICES."

By

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PRES. BROWN UNIVERSITY

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PUBLISHERS' NOTICE

The great interest in the Silver question and the acknowledged ability of President Andrews as a writer on economic themes will be sufficient reasons for a new edition of "An Honest Dollar." The new chapter on "The Fall of Prices" will be read with special interest.

THE PUBLISHERS.

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President Andrews on 16 to 1.

BROWN UNIVERSITY, PROVIDENCE, June 22, 1896.

STEPHEN W. NICKERSON, Boston, Mass.

My Dear Sir:—In yours of the 20th inst., after adverting to Cernuschi's latest position touching the policy of the United States in freely coining silver at 16 to 1 without waiting for an international agreement, you ask what, if any, objection I would urge against this policy I reply that I would urge none. The vast new output of gold in recent years, as compared with that of silver, impresses me that free coinage by us alone would not lead to the displacement of our gold; that therefore, free coinage would be safe. If it is safe it is certainly desirable. Of course no one can be absolutely certain that we could proceed with silver free coinage and yet retain our gold. I therefore do not dogmatise, but leave that to the gold men. To my mind, however, the overwhelming probability is that gold would stay with us. I have noticed of late no serious argument to show that it would not.

Cordially,

E. BENJ. ANDREWS.

To STEPHEN W. NICKERSON,

President Bimetallic League.

THE FALL OF PRICES.

That a very great fall in general prices has occurred since 1873 is uncontested; but the baneful effect of that fall is not so widely seen. Some, indeed, deny that a fall in prices is an evil, and deem it an advantage instead. Such people confuse falling prices with falling costs, two things which are perfectly distinct. The amount of labor necessary to produce the great Commodities of life may be lessening from year to year, and yet the prices, the money values of these things, be increasing. Costs and prices may rise or fall together or one may rise as the other falls. The costs of things were falling in the 16th Century, when American silver was first getting distributed in Europe; but prices were then rapidly rising. Likewise between 1850 and 1873 costs were falling, if any thing, more rapidly than now; but prices were not falling; they were rising. Even when the two movements coincide, as at the present time, they are not to be identified. A lowering of the costs of things is always advantageous, meaning an easier living for mankind. A fall of general prices is always a curse.

It is the *fall* in prices which is mischievous, and not the lowness of the prices after they have fallen. While, during its progress, a general fall of prices, however caused, is always unfortunate, and while the effects of such a fall may be grievous and continue long, yet a low range of prices when attained, considered apart from all the causes which made it low, may be as desirable as a high range of prices. In the observations which I make, therefore, I have in mind falling *prices*, not falling *costs*, and *falling* prices, instead of *low* prices. My purpose is to set forth how unfortunately, in many ways, a fall in general prices works.

Falling prices, such as are now occurring throughout the gold-using world, work outrageous injustice. Appalling is the moral wrong which the fall of prices since 1873 has wrought. Think of all those time contracts, which form so prominent a feature of modern business. Probably 70 per cent. of the world's commercial transactions are based on some sort of deferred payment or credit. It is estimated that a trillion and a half dollars' worth of these deferred payments are outstanding at this time. Appreciating money is occasioning injustice in case of every one of these obligations. The business friction proceeding from this source I mention presently : here I hold up to view the fraud of the system, how increase in the value of money robs debtors. It forces every one of them to pay more than he covenanted to pay—not more dollars but more value, the given number of dollars embodying greater value at date of payment than at date of contract. In these days debtors must struggle hard to be able to pay what they honestly owe : a system which makes them pay from 10 to 50 per cent. blood money is devilish indeed.

Say, if you please—what in now and then a case may be true, though it is not true generally—that the larger batch of commodities at present needed to pay a given debt costs no more labor than the smaller batch which would have sufficed to pay it long ago ; yet where is the justice of a money arrangement which throws all the benefits of improved facilities in industry into creditors' hands and utterly forbids debtors to share in the improvement !

A fall in general prices places a fatal clog, handicap or brake upon the creation of wealth. Making all due allowance for subsidiary difficulties, the radical business trouble from which this and other countries on the gold standard are now suffering is that, owing to the increasing scarcity of full money, goods of nearly all sorts are incessantly having to be sold at smaller and smaller prices. The blight upon our business originates in the scarcity of full or exportable money, leading to a continuous and discouraging fall in general prices, which first made production and credit business less and less profitable, and now at last makes them less and less possible.

Every business is affected more or less with certain fixed charges, levying upon it the burden of an absolute number of dollars. Taxes and mortgages illustrate this. These burdens cannot be lightened when assets and profits fall. You continue liable to pay them dollar for dollar (that is, immensely to overpay them so far as value is concerned), no matter how much your income may have shrunk. Your assets little by little dwindle away, while your liabilities remain what they were. This circumstance infinitely aggravates the load which

great bonded industries like railways have to carry, and vastly aids to multiply receiverships.

The question of preventing the further fall of prices is not a question between the rich and the poor, but one between the productive classes and the non-productive class. Every man engaged in the production of wealth is interested in putting an end to the falling prices. Many such do not see this. Most bankers, for instance, fail to see it. Their relations with mere owners of realized wealth being so intimate they imagine that they themselves derive an advantage from the appreciation of money. They are entirely mistaken, however. Hardly any branch of industry suffers from business depression more than the discounting of notes. Bankers, like others, are profited by good times in trade, and a general fall in prices makes good times in trade impossible.

Falling prices (appreciating money) set up a special, positive motive for abstaining from productive industry. This is the impulse to hoard. Appreciation of money tempts holders of money and of titles certain to be paid in money to cling to these and not to invest in industry. It intensifies the demand for bonds and depresses that for stocks. The present is the age of bondholders. That all are so anxious to invest in bonds is, from an industrial point of view, an alarming sympton. If there is anywhere to be had a mortgage on wealth already realized or practically certain to be realized, every one rushes for it, while new undertakings which would once have been thought full of promise and would be so still but for the money difficulty, strong capitalists avoid unless they can engage in them under special shelter or

guarantee, like a trust or a very high tariff. Irresponsible, feeble and ignorant industrialists, to be sure, go on trying to produce unsheltered. Some of them, by sweating their help, have a little success. The winnings however, speedily find their way into bondholders' pockets. One set of weak producers fails; another rises and runs the same course. Always some are making the endeavor, so that the bondholder never fails of supporters. For my part I pity the class of brave small industrialists quite as much as I do the men who toil for wages. They are a sort of serfs. A business situation which thus coddles the bondholder and snubs the stockholder cannot be healthy.

In this risk to industry from having to produce against a falling market—this bondholder instinct, and this hoarding motive or impulse to clutch at gold and gold-payable paper and not let go save when return in kind is sure—in this condition of affairs we see why our banks overflow with funds which they cannot loan, and our streets with hungry men willing to work but unable to find strong employers who have heart for productive enterprises.

The first victims of falling prices are producers of the weakest class. These are the farmers,—weakest because possessing least capital and unable either to combine or to stop producing. Hence the agrarian distress in every farming country and section of the gold-using world. Hence the efforts of the farmers everywhere to better their condition through various political devices.

The staple of Australia is wool, whose exportation, so profitable until 1873, made that continent very prosper-

ous. A large British debt was contracted. But between 1873 and 1888 wool fell from 33 cents to 16 cents. The whole clip for a year is now insufficient to pay the annual interest on Australia's British held debt. Panic rose in 1888 and was lulled for a time by re-borrowing at high rates. But it came. In January, 1893, 40,000 houses were to rent in Melbourne, the population having decreased in 1892 by over 17,000. The exodus continued and even increased in 1893.

Now it is our turn. The United States pays, mainly in farm produce, at least $100,000,000 a year in foreign interest. This was a light burden in 1873, when wheat brought $1.85 a bushel in London and $1.15 on the farm. In 1889 it had fallen to $1.08 in London and $.69 on the farm. The yield for 1889 was about 340,000,000 bushels, which came to some $115,000,000 less than it would have brought 16 years earlier to say nothing of the lower income in freights, which had to be suffered in order to get it marketed at all. For the year 1893 our wheat brought the farmers only $.54, the lowest price ever known till then. But in 1894 it was lower still. The N. Y., price of wheat No. 2, red, for 1894, averaging the 52 weekly averages, was 60.4 cents. The price on farms at all remote from railways cannot have been above 45 cents. The London price was 22s. 10d. a quarter, a fall of 3s. 6d. from 1893. In 1881 383,000,000 bushels sold for $456,000,000. In 1893 396,000,000 bushels sold for $213,000,000, a shrinkage of $243,000,000.

The money yield per acre of wheat has fallen in 20 years from $13.16 to $6.00, or about 54 per cent. Cotton prices have fallen very much like wheat prices. The cotton crop of 1893, 6,600,000 bales of about 470 lbs.

each, brought the producer not over 6 cents a lb. or about 186 million dollars. By the price for 1873, viz., 16 cts., it would have brought over 310 million more, viz., 496⅓ million. The money yield per acre of cotton has in 20 years fallen from $28 to $10.65, or about 62 per cent. The money yield per acre of wheat, corn, oats, hay and cotton, taken together, has fallen in 20 years from $15.65 to $8.15, or about 48 per cent.

From 1873 to 1882 the Nation's paying power was reduced at least one-third. We could no longer liquidate our foreign interest in wheat and cotton, and had to begin sending gold abroad, a movement intensified in that England has been drawing in the principal of her loans: her net imports of gold having been for 1887, £600,000; for 1888, £800,000; for 1889, £3,000,000; for 1890, £9,000,000.

The agricultural classes, sections, and nations, being impoverished, lose power to purchase of the manufacturing classes, sections or nations, and so these, with the middle men, carriers and merchants, also grow poor. Adversity comes over the entire world of producers. The only people able to prosper are the very small class who create nothing, but live upon income from loans. Even these, though they may profit for a time, cannot escape loss if money continnes to grow precious. Failures and repudiation must ensue. Portugal, Spain, Greece and Argentina have already defaulted on their bonds. Mexico has virtually threatened to do the same. It is believed that Italy was kept from repudiation in 1896 only by the use of British gold to bribe legislators to vote new taxes. The richest money-lenders on earth, the Rothschild's, appear to have concluded that their

surest way to realize satisfactorily upon their loans, is to check the rise of gold by increasing the world's stock of silver money. At the Brussels Monetary Conference, Mr. Alfred Rothschild earnestly argued for such a policy.

Falling prices in any country, at the very same time that they lessen such country's ability to compete with others, invite against it disastrous competition from lands differently situated. In Europe agriculture is at the lowest ebb seen by living men. All silver countries can send their produce there. As silver has not with these lands lost in purchasing power, and as they receive the same amount of it for one sovereign, mark, or franc as once they did for two, they can prosper while starving European farmers. Europe's other productive industries suffer from the same cause. European merchants trading with silver countries find their capital invested there reduced by one half. The par of exchange being annihilated, their present trade with these countries is, if not destroyed, a mere matter of gambling chance.

Sir Thomas Sutherland, presiding at a recent annual meeting of the Peninsula and Oriental Company, after calling attention to the extraordinary advantages which silver countries possess in manufacturing—noticing Bombay as a rival to Manchester, Japan, with its splendid supply of coal, as making enormous strides in cotton and other manufactures, and Shanghai as having entered upon similar enterprises on a large scale—said: "There cannot be the slightest doubt that this low (gold) value of silver, if it continues, must tend to check exports from Europe to these countries, and must stimulate industrial and manufacturing activity in the

far East. It is impossible to foresee to what this may eventually tend, but there may possibly be in this room at the present moment some gentlemen young enough to live to see the Peninsula and Oriental ships built on the banks of the Yang-tse-Kiang instead of on the banks of the Clyde, or the Tees, or the Tyne."

The first spinning mill in Japan was built in 1863, with 5,456 spindles.

At the end of	1883	there were	16	mills	with		43,700	spindles
" " " "	1888	" "	24	"	"		88,140	"
" " " "	1892	" "	39	"	"		403,314	"
" " " "	1893.	" "	46	"	"	about	600,000	"

From 5,000 spindles to 600,000 in 30 years is rapid progress.

The Bimetallist members of the late German Silver Commission placed on the record of the 21st Session the following solemn declarations :

"A set-back to German agriculture is manifest, referable, on the one hand, to the necessity of selling a constantly increasing amount of depreciated agricultural products in order to pay wages, interest, rent, leases, taxes ; and, on the other hand, to the increased power of competition on the part of other countries, silver countries, that is, and countries on a money basis of depreciated paper. In proportion as their silver or paper loses in power to buy gold, these countries, enjoying in effect a high export premium, are able to throw their native products upon the world's markets at prices far beneath what it costs German farmers to produce them, so plunging these latter in deep distress.

The demonetization of silver is also working a more and more visible injury to German manufacturing industry :

(a) On account of the ever-lessening ability of the farmer class to purchase manufactured products.

(b) On account of the decrease in exports to silver lands and of the consequent recoil upon the home market of the articles hitherto exported thither.

(c) On account of the competition offered by the rapidly developing manufacturing plants of silver lands, favored by the low cost of production there and by the premium upon exportation therefrom produced by the fall in the gold price of silver.

Unless means are taken to prevent, it will not be long before the manufactured products of the silver countries will find the German market. To import Indian yarn into Germany is already a paying operation. It is facts like these which have led the Reichstag to vote for another Monetary Conference of the Nations."

One could recite innumerable testimonies of the same tenor with the above did time permit and occasion demand.

Stupidly as the ignorant may overlook it and persistently as those interested in maintaining the sole gold standard may deny it, the United States is a victim of this silver-land competition. That it is which so lowers the price of wheat and cotton, and narrows the market for them. The acreage under these staples, to be sure, keeps up fairly well, though the price falls. Certain writers therefore allege that cheaper production accounts for the fall. If farmers could not afford to sell at these low prices, it is argued, they would stop raising. That is a total misconception of the situation. The farmers continue these crops, not because they *can*, in the sense that the crops pay, but because, being tied to

their farms, usually mortgaged, they *must* continue, however petty their income, and try to make up by the quantity raised the loss suffered in fall of price.

The Feb. 2, 1895, *Farm Field and Fireside*, a Chicago weekly, contains the following, under the title:

"EXTINCTION OF THE AMERICAN FARMER."

"Is the sturdy, self-respecting, independent American farmer decreasing in number and being replaced by the poor starveling renter? A careful student of conditions here and abroad, Mr. F. P. Powers, says that he is. Mr. Powers quotes figures. Between 1880 and 1890 the number of owning farmers decreased in every New England state and the number of tenant-farmers increased. In each of these States there was a marked increase in the percentage of farmers who plowed the fields of another man, and in the sweat of whose brow somebody in Boston ate cake. In the six States, in the ten years, the owning-farmers diminished 24,117 and the tenant-farmers increased 7,246. The percentage of tenant-farmers in Massachusetts, though not large in 1890, was nearly double what it was in 1880. Over seventeen per cent. of the farmers in Vermont and Connecticut and twenty-five per cent. of the farmers in Rhode Island were tenants in 1890. In the Western States the same process is going on."

The dependence of prices in America upon the gold price of silver, in the case of articles whose surplus competes in London with the produce of silver countries, is very direct. One might suppose that the larger market would rule, and that the gold price would remain steady, instead of being itself fixed by the silver price. But it is not so. "It is not the China or India

price that rises but the London price that falls. Merchants find it easier to buy Asiatic produce at the old prices and sell it in London at a concession, than to stand out for old prices at home in order to pay more to the producer. From this point of view, it is really silver that rules the world. It is the purchasing power of the cheaper metal that determines the price all over." All signs point to the likelihood that the prices of commodities in Europe, so far as they can be drawn in any quantities from silver-using countries, must continue to decline with every further fall in (the gold price of) silver.

It is not silver countries alone whose exports crowd those of gold lands. Worse pressure, if possible, proceeds from countries like Greece, Spain, Portugal and Argentina, whose crushing gold debts have driven them to a paper money basis. The depreciation of their paper acts as a premium on exportation from these countries to gold-standard countries, depressing in these latter, first the prices of international commodities, and indirectly the prices of many other commodities.

If, in Spain, say, gold rises from paper par to 25 per cent. above, a Parisian wine-merchant can buy with a given number of Napoleons 25 per cent. more Spanish exchange than before. As it will take a long time for Spanish paper money to lose any of its purchasing power in the rural districts, and as, therefore, each paper peseta will practically buy as much wine after the rise of gold as it would before, the Frenchman's gold laid out in Spain brings him a quarter more wine than before. Therefore any part of the demand on him that he can supply with Spanish wine he is sure to

cover in this way instead of purchasing in France itself. The French raisers of brands previously competing with Spanish are driven from the market, while all French wine producers suffer more or less. The same occurs in case of several other commodities. Paper money countries having this advantage are doubtless laying up wrath against the day of wrath, unless, indeed, as many of them will certainly do if the craze for gold continues, they give up all idea of returning to specie; but in the mean time they immensely gain at the expense of neighboring States whose money is at gold par. Precisely this is the explanation of the Argentine wheat shipments, which have of late become so enormous as to alarm United States and Russian farmers. In 1892 Argentina exported only about 25,000,000 bushels. In 1893 the shipment rose to 45,000,000 bushels; in 1894, it is said, to 75,000,000. The export for this year will probably show an even greater advance.

Who are our chief competitors in the tin industry? Not Cornwall or Australia, but the Straits and Bolivia—both silver countries. Bolivia sent to Liverpool 224 tons of tin in 1885; in 1894, 3,482 tons. In 1873 the Straits Settlement shipped 6,963 tons; in 1894, it shipped 46,640 tons. Australia, a gold country, exported 11,121 tons in 1893; in 1894 only 5,824 tons. Cornwall used to produce annually 10,000 tons; last year its product was but 8,000. Moreover, while the tin industry of the Straits is most flourishing, that of Cornwall is the dispair of everybody connected with it.

American Manufacturing in general is interested in this question. Our home market is in danger. Its

great field is the West and South, and it cannot grow if their staples bring nothing. Moreover, all parties agree with Gov. McKinley's remark at Rochester on the anniversary of Lincoln's birthday in 1895 that "we want a foreign market for our surplus products of manufacture and agriculture." No intelligent American will deny that in some way or other exports from the United States must be increased. New exports must go to lands on the silver basis, as China, Japan, Mexico, Central and South America. We ought to be the principal manufacturers for all these regions. But to utilize this gigantic possibility we must be quick, or those parts of the world will have supplied themselves. At many a point in India and China as well as in Mexico and further South, the tall chimneys already smoke and the clatter of machinery is heard. Soon, unless the currency problem is settled, the teaming millions there will cease to buy of the English or of ourselves.

The patriotic advocates of free silver, aware of this absolute necessity resting upon this country to extend its foreign markets, would take advantage of England's folly in continuing the *regime* of falling prices. They would place the United States at the head of the silver-using nations to do their manufacturing. Much as this proposal has been ridiculed it has great force. The thought in itself is magnificent. We no doubt have an opportunity by the means suggested to "dish" England in the markets of the world. Debating in the Reichstag on Feb. 15th, 1895, Count Mirbach said: "If America goes over to the silver basis, being united with Asia and the two being cut off from gold lands by such fluctuations in exchanges, she will blot out all the commerce of all gold-using nations in the world."

We see in the fall of prices and the accompanying danger to business the true cause of the world-wide movement, so confounding to free-traders, for trusts and for what we should once have called inordinate protective tariffs. These phenomena mark the precise period, since 1873, during which money has been swelling in value and goods losing in value. New South Wales, (till 1891 ever the free-trader's firm standby,) succumbs to this drift. The reason of it is perfectly obvious. Production now is extra-hazardous and needs shelter. When prices threaten or begin to fall, when stock depreciates upon manufacturers' hands, they inevitably struggle to avert these results, welcoming any resource that can aid. Unable to compass their ends otherwise, they agitate for high tariffs. I unhesitatingly avow the conviction that had prices since the war been stationary or only slowly advancing, the rise in United States tariff rates culminating in the McKinley Law would never have been so much as thought of. High protectionists would have been perfectly satisfied without any rise and even with some reduction.

The McKinley rates have been lowered somewhat, and, if the change had been preceded by proper monetary reform, the reduction might be permanent and perhaps in a little time, with the approval of all, made greater still. But I fear that it cannot be permanent. Unless monetary reform comes soon, the tariff which the Democrats have been at such great pains to give us, will speedily be ripped in pieces and rates of duty be imposed higher than those of the McKinley Act. A low tariff policy can never be established in these United

States so long as gold alone continues the basis of our currency.

By no means all those crying for highest protection, whether here or in Europe, believe in protection as a general policy. Many such, in theory, favor a tariff for revenue only; i. e., they would advocate such a tariff were prices stable or rising. Willingness to subject your country's industries to normal foreign competition is one thing; quite another is it to do so when your competitors are helped to beat you by a home bonus on exportation, as is the case with nearly all exporters from silver and paper lands today. In France these "opportunist" protectionists are a powerful and growing party. Their logic is as yet imperfectly understood in this country; but men are mastering it more and more, and it will insure to the protectionist ranks armies of recruits in every Congress and presidential election till general prices cease falling.

Such is the diagnosis of our present industrial disease. In my belief a true cause of morbid conditions in the body industrial has been laid bare. The extrusion of silver from service as full money greatly reduced the amount of the world's money available for ultimate liquidation—reduced it absolutely, and reduced it far more relatively to those needs for fundamental money which rises from the growth of population and business. A distressing appreciation of money per unit has ensued, meaning a tremendous drop in prices. This disastrously handicaps all production. It does not entirely prevent production. Nothing short of killing off the race could do that. But it renders production indefinitely feeble compared with what it would be but

for the handicap. The world needs an addition to its fundamental money; not more bank notes, not more token coinage, not more full legal tender tokens like our silver dollars and the French *ecus*, but more of the sort of money that can do everything that any money can do. We need, I say, a greater bulk of money that is exportable, good in ultimate settlements, suitable for bank and government reserves. A stop must be put to men's ubiquitous rush and clutch for gold. The passion for hoarding must be cured. This can be done only by abolishing the legal primacy of gold. That is the proper prescription for our patient. The only question is whether he can be induced to try the medicine. My belief is that the rehabilitation of silver full money by a few of the great commercial States of the world would instantly bring health. If so, that course is most desirable.

In saying this I am not forgetting the gratifying new output of gold last year and this, in So. Africa, Australia and the United States. This does not lessen in the slightest our need to make silver again full money.

It is interesting to notice the joy with which the new gold is hailed by men who have been assuring us for years that no more money is needed, that the quantity theory of money is exploded, that prices are not fixed by money but by credit, and that every fall in prices ought to be hailed with hallelujahs. Their welcome to this increase of the world's monetary stock justifies their good sense at the expense of their consistency. The veteran French economist, Mr. Leroy-Beaulieu, is one convert. So recently as 1889 he held, as many Americans hold, that the fall of prices, which he de-

clared a blessing, proceeded not from a diminution in the supply of money but solely from progress in the industrial arts, cheaper transportation, and overproduction. He has now changed his view. He believes that the new gold will cause each grain of gold in the world to lose in value, to wit, will provoke a rise in general prices; and that "all the countries on a basis of depreciated money and suffering from low exchanges will be able to better their monetary situation and come back to a solid monetary standard." So Mr. Henry Binns, in the London *Economist* for Dec. 29, 1894, anticipates a "considerable rise" in prices from the increasing supplies of gold, and views the rise as a ground not of "alarm" but of "congratulation." Our American monetary theorists of the gold school must admonish Mr. Leroy-Beaulieu and Mr. Binns. From the gold point of view their allegations are fatally heretical.

To me, however, they are most welcome. Only I cannot agree with Mr. Leroy-Beaulieu in the expectation that gold alone will stay the fall of prices or heal the disordered exchanges now prevailing between gold countries and silver or paper countries. Thus, though 1893 brought forth 9¼ million dollars more gold than 1892, prices did not rise during 1894 but fell ten per cent. instead. The prophecies of a future annual output of gold very much exceeding that of 1893, viz., $155,-522,000, rest on no solid foundation. They are made largely in the interest of speculation. Eight South African mines of which I have read, possessing a capital of only 75½ million dollars, though they have as yet paid no dividend at all, are floating stock that, at the rates at which it is quoted, foots up $215,430,000.

In his last report the Director of our Mint presents some very interesting figures touching the gold outlook, but I do not think all his deductions from them quite sound. He concludes that the value of the gold alone which, in 1893, was available for coinage purposes in the Western nations, exceeded by $7,000,000 the total value of the gold and silver both available for coinage, on the average, in the years 1866-73. Were this true the fact would but serve to illustrate how insignificant so slight an increase is in view of the advance that has meantime occurred in population and business; because, as just stated, prices fell in 1894 instead of rising.

But I believe Mr. Preston mistaken in his conclusion and in a number of the data which helped him to it.

(1) While from the world's gold yield for 1893 he properly deducts Russia's product of 37,325 kilogs as now serving no monetary end, he does not deduct India's product of 5,738 kilogs ($3,813,600.)

(2) While in estimating the industrial use of gold and silver in 1871-3, which he naturally wishes to make as large as possible, that the monetary gold and silver of those years may seem the smaller, he unhesitatingly uses Soetbeer's estimate; on the other hand, in estimating the corresponding figure for gold in 1893, he first scales Soetbeer's outside estimate by 10,000 kilogs, then averaging this result with three less trustworthy estimates, one of which, Ottomar Haupt's, I consider of little value. Haupt's data, the poorest of all, Mr. Preston, in case of three important countries, duplicates in the United States estimate, thus weighing them twice in the result arrived at, and doubling the power of whatever error they may contain. Suess' estimate,

which agrees with Soetbeer's outside figure, of 120,000 kilogs, is ignored altogether. Thus, instead of Soetbeer's outside estimate of 120,000 kilogs of gold as used industrially, etc., in each recent year, he places the figure at 91,125 kilogs.

(3) Except as to three countries, Mr. Preston makes allowance for any increase in the industrial consumption of gold in 1893 over that of preceding years. But it is probable that this was very considerable, since consumers of gold were mainly people who little felt the hard times, which indeed began only when the year was half over, and since the appreciation of gold, by making the possession of gold a badge of wealth, probably increases rather than decreases the *per capita* number of grains of it yearly purchased for such purposes.

My belief is that the gold now used up yearly for art, industry and hoarding considerably exceeds Dr. Soetbeer's extreme estimate of 120,000 kilogs. I so judge because of a general habit—overlooked, I think, even by Soetbeer, far the most careful statistician who has examined the subject—which small jewelers have of using up gold coins coming to them in trade or bought at banks Such coins must aggregate a vast sum, of which the big jewelers, whom alone statisticians consult, would be quite ignorant. Soetbeer's last words, almost, were to the effect that, while the entire consumption of each year's output of new gold in the arts, hoarding and Eastern export cannot be demonstrated, yet on the other hand, no one can demonstrate that this consumption of gold for those purposes does not practically use up the entire yearly crop.

Allowing for the jewelers' habit named and for some increase of consumption in 1893 beyond that of preceding years, I should place the gold going to arts, industry and hoards in 1893 at least so high as 125,000 kilogs. Not insisting on this, however, let us simply apply to 1893 Soetbeer's figure for 1891, viz., 120,000 kilogs, equalling $79,752,000. Adding to this the Russian and Indian product for 1893, we have, as the sum of gold put in that year to non-monetary service, and therefore to be deducted from the total product of the world, $108,565,000, instead of $88,000,000, the amount deducted by Mr. Preston. The monetary part of the 1893 gold product of $155,522,000 was therefore only $46,-956,400, and not $67,522,000, as concluded by the Director of the Mint. The increment to the western world's hard money stock for 1893, instead of being $7,000,000 more than that of one of the years just preceding the demonetization of silver, was thus less by $13,605,575 than the average of those years. When we consider with this the world's increase in population and wealth since 1883—England, a representative country, having gained 7 million souls and increased her commerce, spite of the fall in prices, from 470 millions sterling to 681 millions—it is not strange that prices fell ten per cent in 1894.

I am happy to join the Director of the Mint in his belief that the yearly output of gold is likely to increase for a number of years; and, though non-monetary consumption will increase too, I presume that the part going to replenish the monetary supply will be not a little augmented. But there are three obdurate reasons why one cannot expect our business distress to be relieved by gold alone

Suppose the new gold to succeed in stopping for a single year the fall in prices. No one can imagine the immense spur and enlargement to industry which would immediately ensue. Let prices cease to fall, let investments in enterprises for producing wealth again become safe, as before 1870, let the stockholder again have a chance to make something as well as the bondholder, let the loaning of European and United States capital in China, Japan, India, and Mexico cease to be a form of gambling, and a volume of new industry would spring up which the slight increment of gold money that started it, enlarged by all the credit that could be based upon this, would be utterly inadequate, making a renewed fall of prices the quick and sure sequel. So vast an amount of business would be called into life by an arrest in the fall of prices, that the utmost amount of money which the coinage of gold and silver both could furnish, would be necessary to sustain it. No inflation, I am persuaded, could result from the free coinage of both metals, could it be made general. Both together would perhaps be able to sustain prices, but they would not sensibly raise prices.

A second reason why gold alone cannot be expected to check the fall of prices is that the moment the metal obviously becomes at all plentiful, Austria and India will purchase vast sums that they may place themselves completely on a gold platform. Japan also would probably attempt to change from silver to gold. If this did not turn the gold plenty to penury again, other silver nations would do the same. We have seen that we cannot permanently maintain the gold standard anywhere unless we can do it everywhere. The world of

commerce will not brook division into monetary hemispheres. It will not tolerate the chaos of one basal money for the West and another for the East, one for wealthy centres and one for cruder communities, one for the motherland, the other for colonies. In kind, all the griefs which are moving India to try and place her feet upon gold, press Mexico, all Central and South America, Ceylon, Mauritius. The Straits, Japan, and China to do the same; and no possible increase to the world's stock of gold will enable it to be so spread out.

A third reason for denying that gold alone can heal the world's monetary lesion is as follows. Professor Shield Nicholson makes it extremely probable that even when silver falls in value, as it probably did to some extent during 1893 and 1894, and falls, too, in consequence of causes directly affecting itself and not in the first instance reaching gold at all, still the gold prices of international commodities are determined by their silver prices. That is, suppose some cause in the gold-price world to be so affecting the relation of gold to commodities at large, that, *if you could* annul all influence from the silver price-world, gold would cease to rise in value; yet, since you cannot annul that influence, if silver goes on falling in relation to gold, gold will in fact not cease to rise in value, but the gold prices, in gold lands, of all commodities in which gold and silver lands compete, will continue to fall.

Were silver again standard money everywhere, the demand for it would be so great that its marginal cost, and so its value in the world's trade, would not fall but probably rise, prices in silver falling to correspond,—but if silver remains full money in the silver lands only,

excluding India, the demand for it can all be met at such a marginal cost as will permit the gold price of silver to fall and prices in silver lands to rise, slowly, for an indefinite time if not forever; this fall, through the whole of its extent, pulling down general prices in gold lands.

Facing the three considerations thus presented, I cannot but think the hope of monetary relief from gold alone wild and visionary in the extreme.

But while the new gold does not modify in the slightest the need of restoring silver to its old *role* as full money, it triumphantly answers the only argument which, with me, ever had any weight against trying to restore silver. Hans Forssell, of Sweden, following Professor Lexis, argued in the Monetary Conference of 1892, that however large any international pool of gold and silver might be, making it perfectly impossible for its gold to leak out of it, its gold might become so scarce as to be lost in it. This objection to bimetallist effort then had some force, but the output of new gold now deprives it of all validity whatever. The product ratio of silver to gold in 1894 was only 18.89 to 1. That is, less than 19 ounces of silver to each ounce of gold were mined that year. The proportion of silver will certainly be still less this year.

I.

AN HONEST DOLLAR.

It is always either assumed or admitted that the ideal sort of money would be money with a unit having a steadfast general purchasing power. Says Ricardo, in one of the ablest monetary treatises ever penned:

"All writers on the subject of money have agreed that uniformity in the value of the circulating medium is an object greatly to be desired. Every improvement, therefore, which can promote an approximation to that object, by diminishing the causes of variation, should be adopted. . . . A currency may be considered as perfect, of which the standard is invariable, which always conforms to that standard, and in the use of which the utmost economy is practiced. . . . During the late discussions on the bullion question it was most justly contended that a currency, to be perfect, should be absolutely invariable in value."[1]

[1] *Proposals for an Economic and Secure Currency*, sec. i., ii. But he confusedly adds in sec. i: "No plan can possibly be devised which will maintain money at an absolutely uniform value, because it will always be subject to those variations to which the commodity itself is subject, which has been fixed upon as a standard. While the precious metals continue to be the standard of our currency, money must necessarily undergo the same variations in value as those metals." See sec. iii. "Against such variation there is no possible remedy." The fiat green-

Were money merely a medium of exchange, something to be spoken into being for each act of traffic and then annihilated, permanence in its worth could be dispensed with. But money, also, besides furnishing our system of value-denominations, measures value, serves as a reservoir of value, and as a standard for deferred payments. To fulfill ideally any one of the last-named offices it must preserve its general purchasing power unchanged.

Increase in the value of money robs debtors. It forces every one of them to pay more than he covenanted,—not more dollars, but more value, the given number of dollars embodying at date of payment greater value than at date of contract. Decrease in the value of money robs creditors, necessitating each to put up, in payment of what is due to him, with a smaller modicum of value than was agreed upon.

Such loss, whichever the direction of its incidence, is a misfortune not only jurally but also economically. It is so much friction against the natural and desirable free play of exchange among men. In case money gains in power over commodities, so that prices fall, a quite special degree of this friction is experienced. Under such circumstances money and titles to money

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backers have enough reason to appeal to Ricardo; yet Sir Jas. Steuart was the first to advance the idea of a currency without a specific standard. Ricardo was no absolutist. He proposed to continue gold as the standard, though doing nothing to regulate it. Thomas Aquinas [Op. Paris, 1871–'80, vol. xxv., p. 455, cited by Horton, *Mon. Hist. and Mon. Jurisprudence, p.* 18] had of money this excellent *aperçu; Non semper est ejusdem valoris, sed tamen taliter debet esse constituta ut magis permaneat in eodem valore quam aliae res.*

become rich forms of property to hold, apart from the interest upon them, that is, apart from the use of them. Money is thus no longer freely exchanged, as it should be, for other forms of capital, but is either hoarded or loaned to such as can thoroughly assure its return in kind. It will, of course, be quoted as "easy" at such times, but this will by no means be a proof, as is often assumed, of its continuance in its former plentifulness relatively to the volume of trade, but of precisely the reverse. Interest is low in such a case not because money is as abundant as before, but because it is not, its scarcity having induced fall of prices and so paralysis in industry. Again and again in recent years the London *Economist* has reported money as easy but bullion in demand, low interest accompanying actual decrease in the volume of treasure.[1] Many of our brightest writers upon the monetary problems of the years just past have apparently failed to master this point.[2]

A rise in prices, or, what is the same, a fall in the value of money, though also an evil, has this incidental advantage, that, unless so marked as to imply undue speculation or other morbid commercial conditions, it tempts money out of its hiding-places into circulation, giving briskness to business. But this never does good

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[1] Nicholson, *Money and Monetary Problems*, 98 sq.

[2] See *infra*, the references to Kral, Laughlin, and Becker. Compare Sir Louis Mallet's note to the final Report of the Royal Commission on Changes in the Relative Values of the Precious Metals, esp. p. 120. He gives a table showing that although the precious metal production was very much smaller between 1844 and 1852 than between 1853–1863, the average rate of discount was lower at the same time.

enough to compensate for the evil of unsteadiness in the value of money. To have its value persistently the same,—that is the central virtue of good money.

All admit this, as has been said, yet many forget it. We have, in this country, for many years been hearing much about an honest dollar. What is an honest dollar? It is to be feared that few of the people who love the phrase apprehend with much clearness its true meaning.

It is very often taken for granted that the gold dollar must be an honest dollar, and one may hear this alleged by reasoners in the same breath with the admission made by all, that money is good in proportion to its stability of value. The two positions are of course contradictory, except upon the pretense, which no well-informed person will offer, that gold never appreciates or depreciates.

Again, we often hear or read discourse to the effect that holders of money have a sacred moral right to all the increment of value which can possibly come to it, so that any effort to regulate, at least to limit, such increment, must be wrong, unjust to the creditor class. But this is an implicit, if it is not an explicit, denial to the primary truth of monetary science, that good money must have a steadfast general purchasing power. Gain in money's purchasing power is change in that power, and ought not to be. Of the two, loss in such power is more tolerable than gain: in other words, a *régime* of rising prices is less outrageous than one of falling prices. But either is a bad thing. An ideal dollar would buy always precisely the same amount of general commodity.

There seem to be many who would concede the unfairness of a monetary unit which admitted of falling prices if assured that the fall arose from an increased cost of production in money itself, who allege the equity of the money provided the fall has proceeded from lessened cost of producing goods. But this, again, is an untenable position, unless the just noted premise touching the importance of a stable monetary unit is false. It can make no difference why the relation between money and commodity has changed. The simple fact of such change is proof that the money system is imperfect.[1] To justify an appreciating monetary unit is to justify a *régime* of falling prices, a state of things which, besides involving no less injustice than waits upon rising prices, may easily retard the amassing of wealth as much in a year as would a national war.

Money may have appreciated, first, because the supply of it has decreased, as by losses of or by new difficulty in extracting precious metal; or, second, because the demand for it has increased, as by absolute

[1] See the Address of Professor Foxwell, of Cambridge, before the British Association, September 7, 1887. It is worth our notice in passing that the orthodox *theory* of money, as merely a counter, or, changing the trope, as nothing but a lubricant for the wheels of exchange, is untrue and misleading so far as rise and fall in money values prevail. And within the practical realm, mere inequity between man and man is far from the only evil to be deprecated from shifting money values. Over-taxation or under-taxation, as the case may be, confusion in all fixed charges, salaries, fees, and the like, should also be considered. If money has increased in value the payment of any nominal sum is really an over-payment, and *vice versa*. The life of the fiat greenback movement resides in a perception of these inequities and a natural desire to cure them.

enlargement to the volume of work for money to do, or by the lessening of credit and barter exchanges; or third, because, while those two conditions remain the same, the intrinsic cost of producing given amounts of other articles than money has decreased.

Now people are very reluctant to look upon it as a fault in money to appreciate in this third way. Yet it certainly is. The contrary notion springs from the effort to think money-value as absolute and intrinsic, instead of relative. Here, just as in the other cases, by the only test which can be applied, that of values in general, money has gone astray. It is vain to say that the goods have shrunk but the yard-stick remained fixed. Right in the very fact of its remaining fixed lies its vice; since its sole seal and credential as a just scale proceeded from its relation to general commodity. Change in that relation is one, indivisible, indefensible fact, whether originating in the money term of the equation or in the commodity term.

There is a curious confusion of cause and effect upon this point, which identifies fall of prices with cheapening of commodities. Dr. Barth, editor of the Berlin *Nation*, had in his journal some years since, an article entitled "The Decline in Prices an Advance in Civilization," wherein he set forth such decline, not as a *sign* of economic advance, which, under the world's present monetary system, it sometimes is, but as itself an element in such advance, which it is not. Hon. David A. Wells falls into the same error in his sixth article on Recent Economic Disturbances.[1] That

[1] *Popular Science Monthly*, July, 1887, to January, 1888. These articles now constitute a book.

manufactured and some other commodities have for years been decreasing in intrinsic cost, is a great blessing. But it was not necessary that general prices should fall, and this fall has been no less an evil for accompanying a phenomenon in itself a good.

There are very many, of course, who know perfectly the nature of the evil attending the value-fluctuations of money, but it is certain that none who have not made the subject a study at all adequately conceive the magnitude of the evil. Chevalier, Cobden, and Jevons gave the matter some attention, as it related to the sinking value of money between 1850 and 1870; and Alison has dwelt upon the effects of the reverse process subsequent to 1820. President F. A. Walker also devotes to the topic some pertinent remarks. But I doubt if even these writers, strong as their language often is in deploring the friction and wreckage which they describe, have expressed the whole truth.

Jevons, at any rate, is too moderate. After enormous admissions touching its ravages, he almost apologizes for the change in money value, on the ground that the sorrows springing from it are mostly occult, and that the people habitually refer them to other causes. The question is not whether the infelicities accompanying these monetary vicissitudes are appreciated or not, but whether they are real and serious. That they are both will be the conviction of every student in proportion to his acquaintance with them.

The terrors of a rickety price-system brought us by our war impressed us too little; or rather we idly dreamed that the mischief departed with the restora-

tion of specie. But the change in this respect which came with specie was only in degree. Specie payments are by no means certain to be equity payments.

Our national debt on September 1, 1865, was about two and three-quarter billions. It could then have been paid off with eighteen million bales of cotton or twenty-five million tons of bar iron. When it had been reduced to a billion and a quarter, thirty million bales of cotton, or thirty-two million tons of iron would have been required to pay it. In other words, while a nominal shrinkage of about fifty-five per cent. had taken place in the debt, it had, as measured in either of these two world-staples, actually been enlarged by some fifty per cent.

Between 1870 and 1884 the debt of the United States decreased not very far from three-quarters of a billion dollars. Yet if we take beef, corn, wheat, oats, pork, coal, cotton and bar iron together as the standard—assuredly not a bad one—the debt not only did not decrease at all but actually increased, by not less than fifty per cent.

Robertson, in *The Westminster Review* for October, 1880, computes that the British national debt, at seven hundred and seventy-five million pounds sterling, was, in 1880, represented by a volume of staples which, in 1873 or '74, would probably have cost eight hundred and ninety million; so that the fall in prices between 1874 and 1880 effected a gratuitous distribution among consol-holders of about one hundred and fifteen million sterling, at the expense of the tax-paying public.

He says: "The whole amount of the British government's expenditure in the financial year 1878-'9,

being eighty-five million pounds sterling, represented a purchasing power of at least twelve million sterling more than the same amount of money would have done in 1873-'4, when the total expenditure was seventy-seven million; so that between 1873-'4 and 1877-'8, the burden of taxation in the United Kingdom increased by a purchasing power of 20.7 million pounds sterling, though the nominal increase was but eight millions."

According to the British Commission of 1886 on the Depression of Trade, "the aggregate of our [British] foreign trade in the year 1883, if valued at the prices of ten years previously, would have amounted to £861,000,000 instead of £667,000,000," the actual figure.

"A prudent trader usually considers it safe to trade considerably beyond his floating capital, and to borrow, say fifty per cent. on the security of his plant or fixed capital. Now the constant decline of prices the last few years has virtually swept away his own portion of the capital and only left him enough to pay the loans and mortgages; for instance, a ship or a factory built at a cost of £20,000, of which £10,000 was borrowed, is now worth only £12,000, or 40 per cent. less, and so the mortgage now represents five-sixths of the value instead of half, the trader's interest having sunk to £2,000 in place of £10,000; probably, if trade is unprofitable, he fails to pay the interest, the mortgage is foreclosed, the property is forced off at just sufficient to cover the loan, and he is ruined. I have no doubt that this process exactly describes the condition of vast numbers of the traders of this country and of other countries having a gold standard. A great portion of the commercial capital of this country has silently passed into the hands of the mortgagees and bondholders who have neither 'toiled nor spun'; the discouragement this state of things produces is intense; after it has gone on for several years a kind of hopelessness oppresses the commercial community, all enterprise comes to a

standstill, many works are closed, labor is thrown out of employment, and great distress is felt both among laborers and the humbler middle classes. * * * * * * It is a foolish reply to this that the aggregate wealth of the nation is not changed because it is only a transfer from one class to another; one might as well say that the craft of the pickpocket or cardsharper is innocuous because it only transfers wealth from one pocket to another. The prosperity of the nation depends upon the just distribution of wealth and the security of industry; nothing affects it more vitally than unjust alienation."[1]

These unhappy fluctuations in its value have been occurring so far back as we have any clear history of money. In Greece, between Solon and Demosthenes, owing to its increase, money seems to have lost at least eighty per cent. of its value, or, in other words, prices to have risen four hundred per cent.[2] Nearly

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[1]Samuel Smith, M. P., to Royal Commission [1886] on Depression of Trade and Industry, Appendix C, to Third Report, pp. 429 seq. Compare Frewen, *Nineteenth Century*, Oct., 1885, p. 603. "The real unearned increment is the amount of the difference, ever augmenting, between a diminishing cost of production and the increasing purchasing power of gold, and the one class of the nation which in securing this profit has grown rich, is that class the most idle in private life or the most dishonest and mischievous in politics—those who enjoy without working at the expense of those who work without enjoying. It is indeed hard to decide whether the impoverishment of labor or the premium offered to idleness is the worse accompaniment of a contracted currency." See further on this evil, Schoenberg, *Handbuch der Pol. Oek.*, 2d ed., vol. i. p. 349, foot; *Economist*, Mar. 23, 1889, p. 361; and Wasserab, *Preise und Krisen* [Stuttgart, 1889].

[2] Boeckh's estimate. At the time of Solon, according to Plutarch, wheat cost, per hectoliter, only 37 cents; an ox, 92 cents; a sheep, 18½ cents. Solon debased the currency 25, more exactly, 27 per cent. Many may regard this a new proof of his wisdom. Prices rose, and doubtless "business was good" in consequence. Levasseur well remarks that manufactured articles must have been then relatively less

as great was the fall of money values at Rome between the Punic wars and the time of Augustus.

Very early in the history of the Empire a contrary movement began. Prices fell: the value of money increased. I, for one, am convinced that the slow contraction of money was among the most potent causes of the dissolution of Rome. The product of the mines fell off, ceasing by 476. The influx of precious metal from remote parts ended along with conquest, the stock in the form of wares and trinkets being at the same time too small to spare much for coinage. A vast amount of coin was exported for luxuries. Paper money was unknown. Coin was hoarded, not only as the most imperishable form which wealth could take, but because of its silent, continual increment in worth, making rich without toil those fortunate enough to possess it. Jacob estimates that from the year 14 to the year 490, A. D., the gold and silver money in the Roman Empire decreased from 322,200,000 pounds sterling to 87,033,000, a difference of 235,167,000. The lowering of prices and the rise of money-values must have borne, so slight then the bulk of the world's money, a very close proportion to this diminution in the stock of precious metal.

Neither in classic nor in mediæval times had the world anything like the amount of money now in existence. Mines were few, confined to Western Asia, North Africa, and Europe. Much of the treasure which did exist was locked up in the vaults of kings

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cheap than these figures might imply. In Demosthenes's time wheat brought $1.83 a hectoliter; an ox from $15 to $18; a sheep from $1.80 to $3.60.

and bankers, or hoarded by private persons, so as to influence prices little. At the same time, the volume of trade was of course as nothing compared with its modern development.

A good point of departure for this part of our study[1] is the period of the Flavian Emperors, when the Roman world, most of the time at peace, had become as thoroughly unified as it ever was. Between 100 and 160, A. D., so far as we can measure, the purchasing power of money was not greatly different from what it is at present. Between Marcus Aurelius and Diocletian, say from 180 to 290, prices rose. They nearly doubled, in fact. We know this from a famous decree of the Emperor Diocletian,[2] wherein he severely upbraids the tradesmen for having advanced rates, and fixes by law the maximum prices at which the main commodities of life may be sold.

The cause of this great change was not that money had become more plentiful. It had not. The trouble was that trade had fallen off, owing to wars, over-taxation, bad government, and the other misfortunes of the Empire. In consequence, Diocletian's edict went for nothing. Prices remained high.

A hundred years further on, toward 400, A. D., we find them 40 or 50 per cent. lower again. The barbarian invasions had begun. Mines were shut up and money hoarded. The better to preserve precious

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[1] Which follows, in the main, Jacob, *History of the Precious Metals*, and Levasseur, *De la Valeur des monnaies romanies*, and *La Question d'Or*.

[2] Mommsen has an able monograph on this interesting law, in *Verhandlungen der k. sächsischen Gesellschaft der Wissenschaften*, 1851.

metal, much was made into vases, ornaments and trinkets. A golden vase which King Chilperic caused to be made, " to adorn and illustrate the nation of the Franks," weighed 16 1-2 kilograms, equal to about $10,966. Between 400 and 800, A. D., gold and silver were the rarest they have ever been in historic times. Between Trajan and Charles the Great, prices had fallen in nearly the ratio of five to one, and the purchase-power of money had increased 400 per cent. The main cause of this tremendous change was decrease in the volume of money metal used in trade. The diminution continued until the days of Charles the Great, in whose age, according to Jacob's guess, the stock of gold and silver in Europe outside Constantinople was not greater than thirty-five or thirty-six million sterling. Prices fell, to keep pace.[1]

In 796 the stock of money among the Franks was increased by booty taken from the Avars, and it is said that in consequence of this importation prices had, by 806, risen 33⅓ per cent. This does not prove that the accession was vast: the change was due rather to the slender sum which the Franks possessed before. In the days of Charles the Great, as we know from a grant which in 786 he made to his sons, of certain mining lands, with the right of exploiting them for " gold, silver, and all metals," mining was again begun, but not enough metal was extracted essentially to change prices till toward 1300, when the crusading period ended. The mines of Chemnitz and Kremnitz in Hungary were first worked. In the tenth century

[1] Jacob, *History of the Precious Metals*, vol. i., chaps. x-xii.

those of the Harz Mountains were opened and put to service by Emperor Otho the Great. The extraction was stopped by a famine in 1006, begun again in 1016, interrupted afresh in 1186, but regularly pursued 144 years from 1209 to 1353. Then there was pause for a century, but in 1453 work was once more begun and has continued ever since. The Harz output, nearly all silver, was Europe's main dependence in the full middle age. In the thirteenth and fourteenth centuries other important mines began to add their stock. Schneeberg, Saxony, produced in silver $1,500,000 a year; Brixen, in Tyrol, $250,000; Siderocapso, in Macedonia, $36,000. There were also productive mines at Joachimsthal, Bohemia, at Altenberg and Schellgadin in the Norican Alps, in Facejaber, Hungary, and in Spain, Sweden, and Norway.

During the centuries last named the production of money metal was sufficient not only to maintain prices but to raise them. Levasseur gives as the price of a hectoliter of wheat, in fine silver:

In 1202,	16.73	grams,	=	about	$0.67[1]
1256,	13.98	"	=	"	0.56
1294,	25.38	"	=	"	1.02
1314,	32.36	"	=	"	1.30
1322,	35.44	"	=	"	1.42

The volume of trade had been increasing very rapidly, but that of money had more than kept pace. To secure a given amount of goods required in the fourteenth century nearly three times as much money as in the eighth. But before 1500 a change came.

[1] Reckoning the gram roughly at 4 cts. The fine silver in our silver dollar, 371.25 grains, is 24.057 grams.

Though all the mines known in Europe were open, commerce had, in consequence of the crusades, become expanded out of proportion to the money circulation, and prices fell. Wheat cost, per hectoliter, in fine silver,

In 1328,	21.89 grams.	In 1477,	11.73 grams.
1347,	23.10 "	1492,	9.54 "
1360,	11.96 "	1508,	10.70 "
1375,	16.64 "	1510,	5.26 "
1406,	16.87 "	1511,	7.29 "
1459,	14.42 "	1512,	9.10 "

These were lower prices than in Merovinigian times, for then the hectoliter of wheat never went lower than 12.37 grams, though no mines were wrought, and much gold and silver had been withdrawn from circulation. Wages did not at this period go down as wheat did. The lowest price of wheat, 5.26 grams of fine silver, would be about 25 cents a hectoliter. About 1500, the hand-workers on the castles of Gaillon got a bit less than 2 grams of fine silver a day, or about 8 cents. Wages had earlier been far lower than this.

If, with Levasseur, we regard the value of money to-day as 1, then its value in the age of the Antonines, 130-160, will also be about 1; in Diocletian's time, 0.8 will be the figure; in the fourth century, 13; at the worst period of the barbarian invasions, 7.6; in 796, after the Avar war, for a brief time, 5.8; at 200, 5.7; at 1300, 3.9; at 1400, 3; at 1350, 4; at 1400, 5.7; at 1450, 6.6; at 1500, 9.9; an instant about 1510, 12, which was the highest. A given amount of money would buy then twelve times as much in general commodities as at the present time.

America was discovered in 1492. The year 1519 saw Cortez in Mexico. Pizarro landed in Peru in 1527, and six years later had subdued the Inca empire. Gold and silver began to pour into Spain from the New World. Charles V. closed the Spanish mines to force the miners to America as superintendents of the work there. We do not know how much precious metal was secured. The gold seized in Mexico has been valued at 1,125 kilograms, the ransom of Atahualpa at 5,911 kilograms, and the plunder seized at Cuzco the same. It is safe to say that the first century of American mining multiplied Europe's precious metal nearly or quite five-fold, carrying up prices in much the same proportion.[1] Both consequences became less marked as the quantity of money metal swelled, on the well-known principle that changes in the value of the monetary unit are in vigor and extent inversely as the monetary mass. The piling up of metal went on, and the general though irregular tendency of prices was upward, till the beginning of the present century. Then began a change, and from 1809 falling prices or increase in the value of money prevailed till 1850, after which prices rose again till 1868 or '70, when they once more began to fall.

Upon the results of early American mining I cannot do better than to place before the reader Newmarch's critical summary of Jacob:

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[1] Bodin, *Discours sur le Rehaussement et Deminution des Monnoyes*, etc., 1578, says that during the Valois Dynasty in France prices increased twenty-fold; *e. g.*, the cost of a sheep or a calf went from *sous* to *livres*. See *Eng. Hist. Rev.*, I, 272. Cf. on this, Jacob, I, 250.

"1. Until the year 1521 the annual additions made to the previously existing quantities of gold and silver in Europe (and say Africa), those additions being chiefly *gold*, were not of a magnitude to produce great or sudden effects.

"2. From 1521 to 1545, the disturbance of the previous state of things began to be felt in consequence of the large annual supplies, chiefly of silver, obtained in Peru and Mexico.

"3. This disturbance was greatly increased between 1546 and 1577, by the large supplies of silver readily obtained from the Potosi mine, and by the increase of the supplies of gold and silver from other parts of America.

"4. The discovery, about 1571, of an abundant supply of quicksilver, and its efficacious application to the process of silver mining, does not appear to have done more than counteract, to a greater or smaller extent, the increasing cost of obtaining the precious metals, more particularly silver, in consequence of the comparative exhaustion of the sources of supply.

"5. Adopting the general supposition of the cessation, about 1640, of the decline in the value of the precious metals as compared with commodities, it would appear that that cessation took place at a point (1) when the amount of gold and silver coin (in Europe and America), say £160,000,000 sterling, was probably equal to no more than *one-third* of the amount to which it had attained in the eighteenth century; and (2), when the quantity of gold and silver in the form of articles of use and adornment, say £60,000,000, was probably equal to no more than one-fifth of the quantity so existing during the second half of the eighteenth century.

"6. After the same culminating date of 1640, the average annual supplies of gold and silver reached, and maintained for a century, a magnitude certainly twice as much as the average annual supply existing in the year 1640.

"7. As a consequence of these premises it would appear that subsequent to, say, 1640, the operation, among others, of four principal causes, viz.: (1) the export of gold and silver, but chiefly silver, to India and the East, in payment for Asiatic products; (2) the consumption of gold and silver for purposes of use and ornament; (3) the increase of population and production, and extension of

commercial intercourse into new regions requiring a constantly increasing supply of coin to maintain the former level of prices; and (4) the annual loss by abrasion and casualties on the large quantity of gold and silver in use—were sufficiently powerful to maintain such an exact equilibrium between the average annual supply of and the average annual demand for the precious metals as to counteract any tendency to a fall in their value as compared with commodities."[1]

I by no means allege that the rise and fall of money-value have exactly kept pace with the scarcity and abundance of precious metal. The parallelism has resembled more that between the tides and the motion of the moon. And the ebb and flow of value have confessedly been less marked since the aggregate of money material on earth has grown so immense. Yet it is safe to say that no considerable permanent change in the world's yearly output of gold and silver has ever yet failed to produce an answering change in the power of money over goods. In a word, vexations in kind entirely like those which rising and falling prices have been occasioning in our day, have dogged men ever since money was invented. In degree, of course, the universal introduction of credit immensely aggravates the trouble. Money has been a great good in the world, but here, as in all other things, bane has mixed with the blessing.

Is this plague necessary? Must it be perpetual? Is the commercial world, the entire money-using world, to be forever tormented with this accursed up and down in the purchasing power of money?

The general thought evidently is that the curse is

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[1] Tooke & Newmarch's *History of Prices*, vol. vi., pp. 369 seq.

inevitable, something forced upon us by the very nature of things, to be borne as patiently as may be, but gotten rid of never.

There is, indeed, an indefinite theory to the effect that the disturbances in question will, with lapse of time, become innocuous of themselves. Mr. Jevons seems to have been of this view. He often recurs to the well-known principle that, as the mass of money-material rises, the value-constancy of its unit waxes more staunch. This is important, and, so far as the proximate future is concerned, may afford hope. It is possible, that is, for gold production so to increase as to enable the increment, added to a mass so vast already, to keep prices at their present level for a considerable time to come. Such a result, even temporarily, is extremely improbable. It would require rich diggings like Bendigo, Ballaarat and Forest Creek to reappear, Sutter's flume to be opened again. Placers like these perhaps await the spade in Africa, Alaska or Eastern Siberia, though nowhere in the old gold-fields. It were rash, to say the least, to reason from such a contingency, while all that we certainly know of the gold outlook indicates that the mining of this metal must hereafter be increasingly difficult, irregular and costly.

But should we even see the gold output of 1849-'69 duplicated, we should have no right to expect permanent steadfastness in money value. Gold is produced under the law of diminishing return, and hence must in the long future grow more and more scarce, its cost of production greater and greater, while most of the commodities trafficked in by means of money are not

under this law, are to grow cheaper and cheaper forever, and almost none are so completely in the clutch of the law as gold is. Manufactured goods, an increasing proportion of all, already much more than half, are only very remotely affected by the law of diminishing return, and will go on cheapening to all time.

This analysis has behind it not theory alone. History shows that the tendency of money, if left to itself, is to gain in value. Gain has been its habit through many more centuries than fall. The fall spoken of at Athens and Rome proceeded from special causes, and we perfectly well know that it was not ecumenical even at those epochs. The great centres had money in plenty; elsewhere it was correspondingly scarce and precious.[1]

How striking is this tendency of money to rise in value, right in our own century, despite the vast mass of money metal which has been mined! Money grew precious [prices fell], unsteadily yet surely, all the way from 1809 to 1850, in spite of the relatively enormous increase of those years in the world's store of gold and silver: $135,798,000 in gold, $79,480,700 in silver, $215,278,700 in both.

From 1851 to 1875, the increase being $3,317,625,000 in gold and $1,395,125,000 in silver, or $4,712,750,000 in both, was tremendous enough to raise prices and cheapen monetary units everywhere; yet in 1873, partly by relative deficit of gold, but mainly by the demonetizing of silver, the law of falling prices, of

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[1] Montesquieu, *Grandeur et Decadence des Romains*, ch. xvii. Von Sybel, *Kleine hist. Schriften*, I, 6.

enrichment to the dollar, reasserted itself, and the effect has continued since.

Besides, whether gold is dear or cheap, the advance of wealth is sure to convert an increasing proportion of the annual yield into wares, which, embodying large labor, will from the moment of their manufacture, pass out of the category of potential coin, henceforth not only exerting no steadying influence on the value of money, but even, as so much additional merchandise, making more money necessary.[1]

It is frequently urged, in reply to considerations like these, that the need for metal money is growing less and less, because of the many money-surrogates coming into use, and the need for money or its surrogates lessening because of the numerous substitutes for money more and more usual each year. Telephone, telegraph and bank checks transfer enormous values every day, without the slightest intervention of money, whether metal or paper; and of the work for which money is requisite still, paper at present performs an immense share, as well as coin could, and even better.

Any abridgment to the need of money would tend, of course, to lessen the value of money, to bring down its value *pari passu* with that of commodities. But I for my part am unable to see any prospect of a

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[1] Work on gold and silver wares often doubles, trebles and quadruples their value by weight. For the wear of coin, Jacob, ch. xxii. Suess thinks that nearly all the gold and one-quarter of the silver yearly produced is used up in wares and trinkets and for hoarding. *Future of Silver*, 53. The amount of gold used in the Arts in the U. S. increased from 1880 to 1892 about 80 per cent.

lessened need for money in the future. I find no evidence of any natural, commercial or social causes which are going to reverse the great historic and economic law of falling prices. Let us look at this point with care.

The facts touching new modes of exchange are important, but their bearing on the problem before us is weaker than has often been supposed.

Clearings have for many years, both absolutely and still more relatively to the growth of business and commerce, been vastly falling off in England,[1] and in this country as well. Never since 1882 has the New York Clearing House cleared in an autumn week a sum reaching the billion figure, which was a regular thing that year. In 1886 and 1887 the amount ranged between $500,000,000, and $700,000,000.[2]

It is somewhat deceptive to enumerate both telegrams and checks, because telegraph and telephone mostly do the work which the slower check would at any rate do, though they of course effect more or less exchange in the aggregate which but for them would not occur. So, too, it is misleading to allow in this analysis for *all* the paper money in the world; since, after paper has expelled metal in any land, additions to its volume affect world prices no more.

Quasi-money and substitutes for money aid toward cheapening commodities, by rendering less necessary

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[1] See *Quar. Jour. Economics*, vol. ii, p. 67. See for a full table of the shortages, *Economist*, Jan. 5, 1889, p. 9.

[2] The N. Y. clearings were: in 1881, $48,465,818,212; in 1882, $46,552,846.161; in 1883, $40,293,165,258. Never since have they reached 38 billion dollars.

those large stocks of goods, wholesale or retail, which were once indispensable. But, as we have seen, this cheapening, though in itself an advantage, is indirectly among the worst disturbers of monetary peace, ever helping on that increase in the command of money over goods which is the source of so much woe to the industrial world. Wares, being cheaper, are multiplied, exchange among them tending to demand as much money as when they were fewer and dearer, so that their fall in value, not inducing any fall in money value, continually upsets the par between given amounts of them and given amounts of money. In so far, therefore, as the devices named cheapen goods, while they lessen the money need in the first instance, their secondary influence is to increase this.

I beg the reader to return here again for a moment to the question: What is the world's, or a single country's, monetary need? If we were instituting a money system *ab initio*, the main problem would be, What amount of money will "go round?" How much will do all needed money work? no further care being required as to the volume, except that its size be such as to prevent inconveniently small coins on the one hand, and inconveniently bulky ones on the other.

But when a money system is already in use, another question, equally weighty or more so, must be asked, viz., whether or not the supply is bounteous and well regulated enough to render the unit steady in value. Satisfiable or unsatisfiable, a requirement of the money system to-day is such regulation as may preserve the

purchasing power of the unit of value permanently identical with itself.

Neglect of this point quite vitiates for the purposes for which they were intended, a number of able recent discussions. Thus Dr. Franz Kral, who would no doubt admit as a separate proposition the necessity of permanence in the value of money, in his *Geldwert und Preisbewegung im deutschen Reiche*, 1871–1884, argues that, *although prices have fallen*, the money supply for the years reviewed by him exceeded the need.[1] The late Professor Neumann–Spallart wrote the introduction to Kral's book and concurred in its views. As little does J. L. Laughlin, in the *Quarterly Journal of Economics*, vol. i, prove the sufficient plentifulness of money in showing so interestingly that the chief gold reserves of Europe and America were much larger in 1885 than in 1870–'74, that they also bore at the latter date a much larger proportion to the whole note circulation than at the former, and that high rates of discount were more frequent from 1855–'73 than since 1873. Mr. George F. Becker, United States Geologist, in his excellent notes on the Relative Value and Production of the Precious Metals, in United States Consular Report No. 87,[2] is another who fails to see that the abundance of money in banks is by no means a guaranty that the social requirement for money is adequately supplied.[3]

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[1] He concedes, however, that monetary need increases more rapidly than population. *Viertelj. f. Volksw.* XXIV, iii, 201 seq.

[2] December, 1887, pp. 424 seq.

[3] See at the beginning of this article. The automatic power of money to keep its value unchanged is by no means so great as most of the

To resume, while these substitutes for money have been multiplying in certain directions, others have been withdrawn. The truck system of paying factory help is dying out. Twenty years ago in all our rural communities pure barter transactions were very numerous and covered extensive values. Now money is mostly used instead. Money has mainly supplanted also the quasi-barter so common among our fathers, in the form of book accounts between neighbors, in which money-denominations were employed, though no money except to settle the balance, perhaps once a year.

More significant is that increase in the division of labor by which many important products, like wagons, harnesses, shoes, and clothing, whose manufacture used to begin and end under the same roof, are now gotten up by a dozen, more or less, different establishments. The wagon-maker buys his wheels of one man, his bodies of another, his tops of another. Nearly all country shoemakers, for new work, purchase the uppers ready-made and the soles all cut, from some city firm. Blacksmiths no longer make their nails, rarely even point them, and almost never think of forging a shoe or a bolt. All these things they purchase. The man who builds your house buys the doors, the shutters, the sash, the window-frames and the brackets from different parties, ready-made, as he

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books represent. There is, for instance, no tendency in either dear money [low prices] or cheap money [high prices] to cure itself by mere alteration in the exchange power of a given amount of the money. Dear money, working as a brake on circulation, tends to grow dearer still, as cheap money, accelerating circulation, grows ever cheaper. If these tendencies are reversed or overcome, it must be by extraneous causes.

of course does the metal finishings. The casings come to him all grooved, chamfered and ornamented, requiring only to be sawn and nailed. This breaking up of the trades is a momentous industrial phenomenon, not yet fully enough noticed, and a very great part of the new exchange work which it entails has to be done by means of money.

The progress of civilization everywhere must multiply exchanges, for men will never have equality of relative advantage, either in their endowments or in their environments, and the struggle for existence will force them to employ to the utmost the help which exchange affords. In Asia, Africa and South America it will call for incalculable sums of money, and it is to be remembered that this civilization will have to advance far before it can employ substitutes for money to any extent. Next to the English, the Spanish race is foremost in these new lands, a race showing no more facility than the French in the use of banking institutions.

Vast tracts of our own country yet remain, and will for a long time, in this relatively undeveloped condition. The United States as a whole is far more like France in respect to monetary need than like England. Great Britain is supposed to have a sum of metallic money equal to twenty per cent. of the amount of her commerce. For the United States the figure is fifty-eight per cent., for France eighty-five per cent.[1] Some years ago I found a man who had for a decade owned and carried on the chief store in a flourishing New

[1] For Germany it is thirty-four per cent. The figures are for the later years of the last decade.

England village, ignorant how to draw a check. If this in the East, how slight must be the play of banking methods in the West and South. The gross *per capita* mode of estimating monetary need is fallacious, and I never appeal to it, but it is far more applicable in this country than in England.[1]

The *per capita* capital, surplus, undivided profits and individual deposits in banking institutions of all kinds was, on January 1, 1887, for the entire United States, $76.19. For Rhode Island, the highest figure, it was $304.83; for Massachusetts, next highest, $297.-86; for New York, third highest, $251.08. For Mississippi it was but $3.23—the lowest; for Arkansas, $4.20; for North Carolina, $5.45; for South Carolina, $9.61.

For the Eastern and Middle States together, the sum was $161.62; for the Southern States, including Tennessee and Kentucky, which are exceptionally well off in banking capital, it was $11.52. For the Western States it was $60.33; or, omitting California, as peculiarly strong, $50.59. For the Territories it was $70.02; or, leaving out Montana and Wyoming, which were far beyond the average, $35.03.

Of the national banks alone the distribution is much the same. October 5, 1887, the New England States had 566 of them, with a circulation of 55½ million; New York, New Jersey and Pennsylvania, 706, with a circulation of over 50 million; Delaware, Maryland, the District of Columbia and the two Virginias, only 118, with a circulation of $7,159,830; the remaining South-

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[1]Cf. p. 24, the reference to Kral.

ern States only 313, circulation $12,219,830. Passing to the Western States we find Ohio, Indiana, Illinois, Michigan and Wisconsin possessing 651, with 26½ million in circulation; Iowa, Minnesota, Missouri, Kansas and Nebraska, 478, circulation $10,110,993. But in the extreme West, again, Colorado, Nevada, California, Oregon and Arizona had but 90 banks, circulating $3,101,990, and the remaining territories only 127, circulating $2,431,450. Had we duly weighed such considerations as these, we should have been less surprised at the quantities of silver and silver surrogates which this country has absorbed since 1878, without ever driving gold to a premium.[1]

I beg attention to another weighty consideration. The assumption which so many economists and others have taken up from Bruno Hildebrand, of three great periods in the world's economic evolution, viz., barter, money, and credit, as if credit were to have its fullest development in the most perfect economic state, is now seen to be false. With nations as with individuals, those best able to get credit use it least. In all the wealthiest countries the proportion of cash payments to total volume of trade is steadily increasing. According to Rae,[2] from 70 to 90 per cent. of the world's business is done on credit. In Germany, Siam,

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[1] The experience of Holland since 1873 is instructive in the same direction. See the paper of Professor Greven, of Leiden, before the Econ. Sec. of the Brit. Association, at Manchester, Sept. 7, 1887, printed as Appendix B, to U. S. Consular Rep. No. 87, Dec., 1887.

[2] The Nat. Hist. of Credit, *Contemp. Rev.*, vol. 50, (1886), pp. 252, seq. Rae's generalizations are based on the U. S. Consular Reports contained in the issue No. 43, July, 1884.

and Canada the proportion is 90 per cent.; in Belgium and China, 80. Credit traffic has its feeblest development in Holland; its strongest in Turkey and Yucatan. With progress in economic organization, the sphere of credit becomes less extensive, its operation more intensive and useful. Cash payments, getting the mastery first in wages, in retail trade and in raw products, spread gradually over other fields, shutting up credit to its most helpful and least dangerous functions. People are everywhere "more and more replacing book credit by bills, long credit by short, mercantile credits by banking credits, and banking credits themselves they are making more widely effective and available by specializing the organization of financial institutions to particular branches of industry."[1]

Writers and thinkers of the highest ability in increasing numbers believe that all necessary, or all attainable, fixity of general prices is to come from international bimetallism. There can indeed be no doubt that this scheme would for a long time render extraordinary service if it could only be carried into effect. Silver has proved to be a much more trustworthy measure of value than gold, and the two together, if they could, as I believe possible,[2] be made to circulate con-

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[1] Ibid, p. 255.

[2] Nicholson, *Money and Monetary Problems*, 290, well redargues this. The figures have changed since he wrote, but his presentation is still good logic. In 1884, the civilized nations had about $3,270,000,000 in gold money, and about $2,185,000,000 in silver money. There have been added each year since, in gold, $95,000,000, in silver, $130,000,000 or less. Net yearly consumption of GOLD in the arts (90,000 kilog. at $690 a kilog.), $62,100,000. About 30,000 kilog. gold go to East yearly —say $20,000,000. Total consumption of gold in the West, for purposes other than money, about $82,500,000, leaving for money or

currently at a fixed ratio in all the main commercial countries, would furnish a more stable gauge of value than even silver could, alone.

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hoarding in the West only $15,000,000. Of SILVER 515,000 kilog. are used in the arts (at $45 a kilog. at 15½ ratio)—$23,175,000. The net flow to East, 1,603,000 kilog.—$72,135,000. Total yearly consumption of silver other than money in the Western nations about $95,000,000, leaving some $35,000,000 for coins and hoards.

Now suppose international bimetallism at 15½, and suppose also a rise in gold. No gold goes to the mint, and gold coins are melted into wares. This cannot upset the system till practically *all* gold is driven out: *i. e.*, over three billion dollars. Every step of this way gold becomes cheaper and silver dearer. We have but $35,000,000 silver disposable for money any year, and nothing can make the sum very much greater; while $15,000,000 will be needed to fill the gap in coinage arising from the fact that no gold is coined. So, there are only $20,000,000 in silver available to drive out the more than three billion dollars gold money. Fifteen million dollars more gold yearly will be in the market for the arts and the East from non-coinage; and twenty million dollars driven out—in all, thirty-five million dollars over the usual 82½ million so used. If we suppose that, for any reason, *more* silver is available for money, so much *more* gold is made idle, so as to depress the metal's value. How, under these circumstances, could international bimetallism fail, unless by treachery? Further, writers who deny that international consensus could cause the two metals to float concurrently at a given legal value-ratio, overlook too much the little effect which their relative production has always had on their relative value. Becker has splendidly shown this in his Notes to Atkinson's United States Consular Report, No. 87, December, 1887. He writes out the figures and then presents their truth graphically, in two curves. In the 16th century, two values of gold to one of silver were produced at the beginning, three of silver to one of gold at the end; yet the value-ratio between the metals altered only from 11:1 to 12:1. For nearly half of the present century, three values of silver were mined to one of gold; after 1848 just the reverse; yet till 1872 the ratio varied so little that both metals were every year but one brought to the French mint, where the relation of 15½ : 1 was observed unchanged.

II.

BIMETALLISM.

THE cessation of silver purchases by the United States Government has not settled the Money Question. It has but cleared the ground for a rational discussion thereof. The people who suppose the present status of the world's hard money to be "final," will find themselves as much mistaken as did those who cried "finality" touching Slavery Legislation after the compromise of 1850. The advocates, all about us, of scientific bimetallism, who for a long time have held their tongues lest they should be classed with the *soi-disant* bimetallists wishing the United States alone to open mints to silver, may now speak freely; and they will need to do this in order that monetary science here, instead of halting or going backward as it is now in some danger of doing, may advance and attain the development which it has in Europe.

Hon. Bertram W. Currie, the distinguished London banker, remarked to the writer not long since, that all the British political economists "seemed to be tinged with bimetallism." The statement is quite true. In Great Britain the field of academic battle over the

standards is securely possessed by the bimetallists. Even among "practical" Britons, the business men, bankers and industrial statisticians, bimetallists form a strong and growing section, perhaps a majority. Of the theorists who still champion monometallism, a few reside on the Continent of Europe, but most in the United States. Even here they have somewhat modified the tenor of their statements. Not one of them, I think, longer denies that gold has recently risen in value, or that considerable inconveniences have proceeded from this. Not one, I also think, wishes that gold should supplant silver full money all over the world. Further, "no economist of reputation will lend his name to the idiotic objections which you will see in some of the daily newspapers" to the effect that to suppose a stable ratio maintainable between silver and gold is to believe in a fiat power on the part of government to create value in defiance of supply and demand.[1]

"It is permissible," as Mr. Balfour says, "for those who have formed their opinion on these questions upon imperfectly remembered scraps of economic knowledge picked up fifty years ago, still to hold the view that the bimetallist is a lunatic; but," he adds, "I do not believe that any man who has seriously considered the literature of this subject during the last generation holds this opinion or can possibly hold it."

However, upon many points, wide dissidence of view still separates bimetallists from the theorists who oppose them, and to some of these points I wish to direct attention.

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[1]Rt. Hon. A. J. Balfour. Mansion House Address, Aug. 3, 1893.

Permit me, first, to name a few matters which demand explanation rather than argument. While the most accurate bimetallists, perhaps, sometimes lapse into the expression "double standard," every one of them abhors it as a dangerous misnomer. It is not, as is sometimes said, impossible that there should be a double standard for measuring values. Such exists to-day in the great ports of India and China. Goods there are worth so much in gold and so much more in silver. It is the same in Italy, where paper prices form one list and gold prices another. But that state of things is always unfortunate, and if the doctrine of bimetallism presupposed such, it would deserve only condemnation. What bimetallism essays to provide is an absolutely simple and unitary standard of value, realizable infallibly and continuously in either of the two metals. It is not pretended, either, that the value embodied in the unit of this standard will be perfectly stable, though such will be more nearly the case with a value-standard incessantly realized in each of two metals than in one revealing itself in a single metal only. The contention is that, under bimetallism, a given article or lot of goods in a given market at a given time will bear the same price, whether appraised in the one metal or in the other.

Again, to favor the Sherman law, the Bland law, or any other scheme for purchasing silver by the government, is not only no part of bimetallism, but in theory flagrantly hostile thereto. That sort of legislation has done the cause of bimetallism immeasurable harm. It engenders, far and wide, the notion that what bimetallists desire is the purchase by the public treasury of

all the silver which any one pleases to sell. Bimetallists will have nothing of the kind. They either deny or deplore the necessity of any bullion purchases by government except for subsidiary coins. Their demand is simply that, so soon as it can be done with safety, every holder of silver be permitted to bring it to the mint, as all may now bring gold, and have it coined into money that shall be legal tender in all amounts.

Another hallucination about bimetallism is that it involves an attempt to fix the relative if not the absolute values of gold and silver by the direct operation of statute. It means no such thing. Supply and demand, economic laws, that is, are to determine gold and silver values under bimetallism, as now. What is expected of bimetallic legislation is simply that it will set free certain now latent economic forces, which shall make a grain of gold bullion steadily worth so many grains of silver bullion. Bimetallism will force no man to give or take any more or any less of anything for a given amount of any other thing than he pleases of his own free will to give or take.

I beg to explain, still further, for a word upon the point seems to be needed, that no bimetallist, prevailing his system, expects gold and silver to be present in precisely equal amounts in any one nation, community, bank, safe, till, or pocket. Bimetallism would make the relation of the two metals in this respect like that now experienced in the United States by greenbacks, national bank notes, and silver certificates. One of these categories predominates in one parcel of money, another in the next, in the third they may be repre-

sented equally ; though usually it is not difficult anywhere to get, or to be rid of, either sort of paper, if one is so minded. In like manner, with bimetallism, no bank and no man would be forced, save in quite abnormal cases, to use silver in particular, or gold. It is, in fact, among the chief virtues of bimetallic money that it would render the possession of gold, for such as really need or like it, far easier than now. What is said of the preference for gold in great commercial centres is mostly quite true and important, a fact which bimetallists recognize and would provide for. But they heed the other fact as well, that, in all countries there are uses, and certain communities for nearly all whose uses, silver is a fitter money than gold ; in which, therefore, if the presence of gold is enforced by the exclusion of silver from complete monetary function, vicious scarcity of gold is caused in places and services where gold ought to be.

With this it should be remembered that, whatever form of money is in vogue, the people of civilized lands will henceforth use less and less metal, whether silver or gold, in ordinary transactions. Notes and coin certificates will serve instead. The weight of silver money per unit of value, while to a certain extent a point against it, signifies much less than is usually represented. Freightage and insurance on coin and bullion are charged for by value, not by weight. In carting silver short distances, piling it in vaults and shifting it from place to place there, its weight and bulk are no doubt inconvenient. These very qualities, however, sometimes figure as virtues, preventing loss from theft or oversight, and at worst

they are trifles considering the remarkable merits of silver as money.

Sailing out, now, into deeper waters, we can hardly steer clear of the question touching the possibility of bimetallism. In his address already cited, Mr. Balfour says:

> "I am well aware that there is a vast mass of opinion which appears to consider that the man who maintains the possibility of bimetallism should be ranked with those who think that the sun goes round the earth or that the earth is a flat disc; but I may say without offence that those who hold this opinion show themselves but little instructed in the recent history of the subject." . . . . . "I doubt whether there is a single economist of reputation under sixty years of age who will commit himself to the view that it is impossible to maintain bimetallic money."

In referring to "the recent history of the subject," Mr. Balfour doubtless had in mind the utterances of the Royal Gold and Silver Commission of 1886–'88. This Commission, it will be recalled, comprised six monometallists, one of whom, L. H. Courtney, M.P., has since become a bimetallist, with six bimetallists, and did very thorough work. Its report forms the richest mine of information on money and prices now anywhere open. This fact, with the great ability of the Commissioners, renders those propositions in which the entire twelve men agree, exceedingly significant. All the monometallists, the rest of course concurring, express themselves as follows:

> "Looking to the vast changes which occurred prior to 1873 in the relative production of the two metals without any corresponding disturbance in their market value, it appears difficult to us to resist the conclusion that some influence was then at work tend-

ing to steady the price of silver, and to keep the ratio which it bore to gold approximately stable.

"These considerations seem to suggest the existence of some steadying influence in former periods, which has now been removed and which has left the silver market subject to the influence of causes, the full effect of which was previously kept in check.

"Now, undoubtedly, the date which forms the dividing line between an epoch of approximate fixity in the relative value of gold and silver, and one of marked instability, is the year when the bimetallic system which had previously been in force in the Latin Union ceased to be in full operation, and we are irresistibly led to the conclusion that the operation of that system, established as it was in countries the population and commerce of which were considerable, exerted a material influence upon the relative value of the two metals.

"So long as that system was in force, we think that, notwithstanding the changes in the production and use of the precious metals, it kept the market price of silver approximately steady at the ratio fixed by law between them, namely, 15 1-2 to 1.

"We think that in any conditions fairly to be contemplated in the future, so far as we can forecast them from the experience of the past, a stable ratio might be maintained if the nations we have alluded to were to accept and strictly adhere to bimetallism, at the suggested ratio. We think that if in all these countries gold and silver could be freely coined, and thus become exchangeable against commodities at the fixed ratio, the market value of silver as measured by gold would conform to that ratio, and not vary to any material extent."

The monometallist commissioners all believe that gold would not disappear from such a bimetallic league, viz., that silver and gold can be floated together in one and the same monetary system. They declare :

"If the arrangement included all the principal commercial nations, we do not think there would be any serious danger of such a result" as the loss of gold from the system.

"Authorities," Francis Wayland once keenly remarked, "are worth only what they are worth." The Herschell Commissioners, it may be said, were not infallible. True, but, under the circumstances, their testimony is of great weight. It will yield only to argument, and it is certain that no argument yet adduced has shaken it in the slightest.

Mr. Giffen is at much pains to show that, under the French Mint Law of 1803, which the Commissioners declare to have "kept the market price of silver approximately steady at the ratio fixed between them, namely 15½ to 1," this ratio was not perfectly maintained in the London market; that there, at the ratio, now the one metal and now the other outvalued its mate. But Sir Guilford L. Molesworth and others have deprived this consideration of all force, by pointing out that the premiums which from time to time appeared in London on gold and on silver were accounted for by the state of exchange on Paris, where alone the steadying agency of a bimetallic system could take effect. Mr. Giffen's facts, so far from weakening any bimetallist position, make it still more evident that, had Britain, like France, used silver as well as gold for full money between 1803 and 1873, the premiums referred to would have been unknown.

Still feebler significance had the slight agio which, during the years named, sometimes gold and sometimes silver used to command in Paris itself.[1] The agio, when it occurred, merely signalized some temporary local demand for coin, the actual handling of coin being more necessary then than now, more necessary

[1] See H. H. Gibbs, *Colloquy on Currency*, 46, 48.

in France than in England. It has been shown that the French agios on gold, say, (and the same of silver) were often highest during the very years when most gold was coming to the mint, overthrowing the suspicion that they sprung from any failure of bimetallist principles. From 1803 until the Franco-Prussian war, but one year elapsed that did not bring to the French Mint considerable quantities of gold and silver both. That year was 1860, when, for the moment, silver was too dear for profitable minting at $15\frac{1}{2}:1$.

Professor Lexis, of Göttingen, criticises the Royal Commission for not sufficiently noticing the progressive scarcity of gold. He expresses the apprehension that, supposing a bimetallic league of states, gold, even if rated very high in comparison with silver, might, in the course of years, attain a premium, not through any drain from without the league but by pressing demand within. This suggestion offers monetary students of all schools much food for reflection. In the view that gold is henceforth to become more and more scarce, I concur; but, considering the large output of gold in 1893, likely to continue a decade or two, its evanescence will certainly be less rapid than Professor Lexis feared. Were the great nations to join in freely coining silver and gold at the common ratio of 15.5 : 1 or 16 : 1, no premium on gold would, I believe, appear for a century. When it at last came, change the ratio and it would go again. Since, by the supposition, the need would have arisen from extra preciousness in gold, the ratio would in all probability be altered by lightening gold coins, not by enlarging silver ones.

Lexis' scruple weighs not against bimetallism but

against over-valuing silver in relation to gold in case bimetallism is attempted. It indeed powerfully favors the use of both metals. If the world's volume of gold is destined soon so to shrink that gold would be too precious to circulate freely though relieved by silver in every possible way, it is fatuous to make money out of it alone, in never so small a group of nations. It would be so even were it possible, which it is not, to sequester the given group from the rest of the world, and so nullify the tendency now observable to extend gold and gold trade further and further.

That bimetallism could be made to work, one finds still clearer on seeing that its operation in no sort traverses, as many mistakenly allege, the law of supply and demand. No bimetallist contends that governmental action can annul this law. Only its mode of operation can be changed. That the value of money metal, under any system, is fixed by the relation of demand and supply, all admit. But while law cannot control value independently of supply and demand, it can set free an economic force which will largely control supply and demand themselves.

The bimetallist affirms (i.) that the monetary demand and supply of gold and silver, supposing both freely coined, in fixing the purchasing power of given quantities of them, overwhelmingly out-influence the commodity demand and supply; (ii.) that law can at least establish a legal-tender and debt-paying parity between a given quantity of gold and a given quantity of silver, which parity a treaty could extend throughout any number of states; (iii.) that, since men are wont to discharge their pecuniary obligations as easily as they

can, the existence of such legal-tender and debt-paying parity would, in case this legal parity should ever for any reason fail to match the commercial parity, stimulate the demand for the cheaper metal, appreciate it, and so tend to identify the parities again; (iv.) that if the field of legal parity is large, embracing in its bimetallic basin a third or even a quarter of the world's gold and silver, unless the value-ratio between the two metals denoted by the legal parity is wildly at variance with the ratio in quantity between the total stocks of the two, the aforesaid stimulus of demand for the cheaper will overbear every tendency to part the parities named, and maintain the unit quantity of gold and the unit quantity of silver perpetually at the same value.

Be this theory true or false, it involves no ignoring, no defiance of supply and demand, or other hocus-pocus whatever, but presupposes the free, rational, and decisive play of economic forces at every step of the process it describes.

Much has been made of the fact that gold monometallism spreads as it does from country to country, and this in spite of the earnest objections early urged against it. Soon after Germany demonetized silver, the Latin Union ceased coining it for standard money, as did Russia and Holland. The Scandinavian states went further, extruding it from their currency altogether save for subsidiary coins. Roumania, later, followed this example, and, still later, Austria. Holland plants her colonies as well as herself upon the yellow metal, and now Great Britain attempts the same with her immense Indian empire. People point triumph-

antly to this steady march of the sole gold system as if it were beyond question a phase of advancing civilization. "Commerce," it is declared, "is tired of silver; only gold will satisfy it. This is a natural law of progress, and it is irrational as well as useless to oppose it."

To my mind this thought is pure fallacy from beginning to end. It is patent and superficial fallacy as well, such as only those could fall into who know nothing of monetary history and whose present vision is limited to a few central homes of commerce. The lightness of this *ubique et ab omnibus* argument is seen in the fact that one often hears it from men who refuse to regard the acceptance of Protection by nation after nation as weighing in its favor. For protectionism the consideration has logical force, however slight; in the other case it has none at all. The difference is that while the laying of protective tariffs, even by the strongest nations, in no sort coerces any of their neighbors to do the like, the adoption of gold as the sole ultimate money by any considerable group of commercial nations compels contiguous states to follow whether they will or not, irrespective of the rationality or intrinsic desirableness of the change.

No doubt, since Europe closed its mints to the white metal, the gold system has obtruded itself upon one country after another in a perfectly natural manner, but this in no sort proves that the process was wisely begun. Disease works as naturally as health, devolution as evolution. I maintain that, however natural what has followed, the demonetization of silver was

not natural or rational but violently the reverse. The policy was not debated but entered upon in entire blindness. Neither in England, in Germany, nor in the United States, the lands where it was inaugurated, was any legislator at the time awake to the stupendous significance of the act. Hardly a man in public or in private life then so much as dreamed of its grave and far-reaching consequences, in contracts vitiated, business asphyxiated, and the bisecting of the commercial world.

The statement which one hears so often now, regarding the progress of wealthy countries from silver to gold, was not the belief of Locke, who declared that "gold is not the money of the world, or measure of commerce, nor fit to be so." Sir Isaac Newton and Ricardo also give no countenance to that modern fancy. It had birth in the imagination of the first Lord Liverpool, who gives us to understand that the English people, by general consent and without any influence from the public authority, had, by 1698, come to prefer silver to gold. The noble Lord was entirely mistaken in this, as Dana Horton and Sir David Barbour, following Ricardo and Lord Ashburton, have shown. Ricardo explicitly says that the English took up gold, not because better fitted than silver for the business of a rich country, but because the English law overvalued gold, making it hard for silver to circulate.

Silver was then the world's money, and England as now the centre of the world's commerce, the bank for all. The profit from paying gold in England and silver elsewhere, a profit originating entirely

in legislation, was the sole reason why England became mainly a gold country in the eighteenth century.

The English thus preferred gold during the eighteenth century only in the sense in which the people of the United States preferred gold after 1834 and before that date preferred silver. Such was then England's ignorance of monetary history and theory that in 1816 the second Lord Liverpool had little difficulty in foisting his father's error upon Parliament. Silver was demonetized, and Great Britain thus started upon a false track. The French mint, so near, doing bimetallic work for both nations, prevented the evil from at once revealing its virulence; and the high career of Great Britain commercially, prepared for when the nation was bimetallist, evolved through association the baseless idea that gold money and commercial greatness have some logical connection.

In 1872-'73, this idea greatly influenced Germany in favor of laying silver aside, though with it wrought certain other motives, the wish for simplicity in monetary system, dislike of France, and, most of all, what so strongly inclined the Paris Monetary Conference of 1867 toward gold monometallism, the then plentifulness of gold. Demonetization of silver by the United States in 1873 was also motived largely by the example of England and the thought of simplicity. That no partner to the deed understood or had seriously considered its bearing, has since been abundantly proved. It is thus quite certain, I believe, that the ostracism of silver began in ignorance, not at all in that circumspection and deliberation which must have marked it had it been a true instance of economic evo-

lution, like the discarding of stage-coaches or the abolition of slavery.

But did not the demonetizers destroy better than they knew? Is the sole gold form of money so bad after all? We live, business increases, many are happy all about us. Out with your pessimism! The feeling voiced in words like these may be crystallized into three definite inquiries: (1) Will a grain of gold purchase a greater amount of general commodities to-day than in 1873? (2) If it will, what are the causes of the change, facts connected more with the gold, or facts connected more with commodities? And (3) provided gold has increased in value per grain, what harm, if any, has this done? These are very important problems.

Answer to the first is obtained by defining terms. In these, as they touch this discussion, the utmost looseness prevails. For instance, nothing is commoner than to hear a reasoner admitting that general prices have indeed fallen, but declaring that the fall has been caused by the cheapening of commodities, not by any appreciation in gold. This is a contradiction. If general (gold) prices have fallen, gold has risen, appreciated. A fall of general prices is nothing else but an elevation in the value of the money in which they are appraised, and this is equally true whatever the cause of the change. Suppose the new relation between gold and goods to have grown solely out of the lessened cost of goods, it is none the less a fact that gold has appreciated, for the appreciation of gold means simply that a given weight of it will buy more wheat, meat, clothing, etc., than it would some time ago.

What people seem to mean when denying appreciation in gold while admitting that general prices have fallen, is that the altered form of equation between gold and commodities has not originated on the gold side of the balance, namely, has not originated either in any increase of the effort needed to produce gold, or in any increase of the work required of gold money in consequence of the disuse of silver; but has sprung up on the goods' side, to wit, has come wholly from a lessening of the effort which men have to put forth to create commodities.

Distinguished as are the writers vouching for this view, I cannot but think them in error. Doubtless the cost of producing most goods has declined since 1873, but there is no evidence that it has since then lowered a whit more rapidly than between 1850 and 1870, when prices were rising instead of falling. I venture to pronounce this an unanswered and an unanswerable argument. Another is, if possible, more decisive still. How can a *régime* of falling costs, which of course means increasing plenty, larger profits, higher wages, be also a *régime* of hard times, panics, strikes, lockouts, failures, increasing crime and increasing pauperism, such as the gold-using world has passed through since 1873? Some of our people wish for a revision of the tariff in order that manufactured products may be ours at lower cost. But if the industrial purgatory in which we have been since 1873 is the consequence of lower cost, good Lord, deliver us from tariff revision! It is my belief that if general costs had fallen since 1873 as gold prices have fallen, these twenty years, which have been so lean, would not only have matched

the fat decades preceding, but would have formed industrially, economically, and in respect to every interest of civilization, the most splendid era in human history.

Elaborate effort to show that gold money is serving us honestly has been made by noting special cases of lowered costs in articles which have confessedly gone down in price. To me this is as if, when volcanic action has caused a mountain to shoot up in the midst of a plain, a man should argue that the mountain had not risen but the surrounding earth given way. He might say: This vulcanism theory is very abstract and questionable. On the other hand, that ground often settles we all know. The land in question has been much trodden. Mass meetings, circuses and picnics have been held there. Besides, naturalists who have looked into the question believe that certain animals have been in the habit of burrowing beneath the surface, so that the ground would naturally cave in from time to time and become depressed relatively to the mountain top. Such arguments could not but attract attention; but I think that after weighing them many would still cling to the theory of vulcanism.

That certain commodities have not fallen, and that such as have fallen have fallen unequally, in no wise disproves the rise of gold. Part of the fall which has occurred is confessedly owing to lowered costs. Articles thus affected have gone down more than others. Wages of skilled labor have perhaps even risen somewhat as gold has, and the best city lots have risen more than gold. All this is precisely what we should expect supposing the enchanced scarcity or activity of

gold to be the chief cause of these changes. Among the phenomena cited, only the rise of wages called for the slightest comment. The average value of labor, including unskilled, has not, in my belief, advanced so much as gold, even if it has risen at all. If it has risen, this is because nearly all labor, particularly skilled labor, is, like city land, more or less completely subject to monopoly.

To account for the new preciousness of gold we must, then, look beyond new processes of manufacture and transportation to the conditions affecting gold production and gold money work. At both these points we find ample reason for a rise in its value.

That the effort which must be put forth to get gold from the earth is greater than formerly, Leonard H. Courtney, M. P., has most convincingly set forth. Suppose the said effort to be as before. This would prove the recent fall in prices to be a fall in costs, as so many believe. Under this supposition the condition of things will be this: Gold has, say, 40 or 50 per cent. more purchasing power than before, but its production demands no more intrinsic effort (metaphysical cost) than before, while the mercantile or money cost of the labor and capital necessary in extracting it is some 25 per cent. less than before. Now the inevitable result of such a situation would be a vast increase in the amount of gold yearly produced, *whereas the amount produced has greatly fallen off instead of increasing.* We are driven to conclude that our initial supposition was erroneous, and that the difficulty of unearthing a grain of gold is now greater than it was in 1873.

When to this it is added that from a billion to a bill-

ion and a quarter of new gold money has been called for by Europe and the United States since 1873, to say nothing of the potential demand offered by states now on a paper money basis but preparing to resume specie payments, one need look no further for the reasons why gold units will purchase more now than twenty years ago.

Against considerations like these it is idle to speak of gold as plentiful enough, placing in evidence the great stocks of gold in national treasuries and banks. Even Soetbeer admits that these do not disprove the dangerous paucity of gold. They in fact prove such paucity, as has been clearly pointed out by Sir Louis Mallet and many others.[1]

Had gold not increased in value, the investment of it in productive industry would be more profitable, so profitable as to elevate considerably the rates of interest now prevalent, and draw down these piles of treasure at present so huge and idle. I, of course, admit that vast chests of gold are held in certain countries under the operation of a motive different from the economic one, viz., the wish to be ready for war ; but even these are evidence that gold is ever harder and harder to get, since, were it not so, that necessary for war could, on occasion, by any nation possessing good credit, be quite readily provided at short notice.

There are those who deny the increasing value of gold on the ground that not price but labor is the true test of value. This view seems to me to contain the most interesting complex of fallacies that ever beguiled intelligent minds. I can touch but a few of these.

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[1] See *supra*, p. 3, note.

1. The notion of labor as the measure of value, put forward in certain incoherent statements of Adam Smith but not adhered to by him, has been rejected by every representative economist since.

2. That labor is the sole cause of wealth and that things are wealth exactly in proportion as they embody labor, is a fundamental tenet of socialism, anarchism, and communism, the admission of which leaves one no logical defense against the general doctrine of those people.

3. Like socialism, etc., it takes no account of the agency of capital in production.

4. Were this theory to be carried out, a man's wages could never rise without robbing some other man. Every man's just wages will be the value which he creates, and no more. It can also be no less. If you subtract aught to remunerate capital, you either depart from the theory or else defraud the laboring man. Anarchists and Communists, who wish death to the unemployed rich, will hail this doctrine with delight.

5. The labor-standard of value would, unless its introduction were to end all improvement in modes of industry, commit business forever to a *régime* of falling prices. The gold standard appreciates fatally, but, unless production ceased to grow cheaper, as now, a labor-standard would appreciate still more disastrously.

6. The ethical aspect of the labor-standard theory is the worst, unless, again, the use of this standard is going to abolish all improvements in industry. If you contract a debt to-day, payable in ten years, you must then, to pay it, part not only with such quantity of

things as now equals in value the given number of labor units, but with fifty or a hundred per cent. more, according to the increase that takes place meantime in the productive power of labor. Such a system when understood would annihilate credit at once. This by itself would probably forbid any increase of productivity in the labor unit; but I will not suppose this the reason why the labor-standard system is expected to work.

It cannot be that the few recent writers, who seem inclined to this view, fathom its grave implications. Not one of them would wish to pay his debts on this plan. It is, in fact, wholly untenable. The great economists, including Adam Smith himself, are right in gauging the value of money by the range of general prices. Gold has then risen in value.

Coming at last to the third of the questions mentioned at page 45, what harm, if any, has the rise in the value of gold occasioned, I unhesitatingly avow the conviction that the magnitude of such harm is past all calculation or conception. Not to be too lengthy, I must here summarize rather than discuss.

The rise of gold, that is, the fall of prices, mainly consequent upon the demonetization of silver in and after 1873, has had, in particular, four great results, each of which has been pernicious in the extreme.

First, It has tainted with injustice every time-contract made anywhere in the gold-using world since 1873.

Second, It has all over this vast area afflicted productive industry with anæmia, asphyxia, and paralysis, owing to which the world's wealth is to-day less by

billions than it would be had normal monetary conditions been enjoyed.

Third, It has split the commercial earth in two, into a gold-employing and a silver-employing hemisphere, between which, so great is the difficulty of exchange, commerce has ceased to be a rational affair and has become in effect a game of hazard. Thus, in another way, have the growth of wealth and the advance of civilization been retarded.

And, fourth, By thus deranging international exchanges, it has discouraged and, upon a colossal scale, lessened in amount, the loaning of capital by rich countries to poor, indefinitely to the disadvantage of both, so, in still a third way, hindering the weal and progress of mankind.

III.

MONEY AS AN INTERNATIONAL QUESTION.

IN his charming address opening the Monetary Conference at Brussels, on the 22d of November, 1892, M. Beernaert, prime minister of Belgium, spoke as follows :—

"That which will in the future be looked upon as the characteristic mark of our century, this century so strange and grand in many respects, will be the prodigious and incessant development in it of international relations. Formerly, one belonged to his village, his province, or, at most, to his country. A man knew only his neighborhood. He shared its prejudices and its passions. The foreigner he viewed either with indifference or as an enemy. To-day, the horizon of humanity is enlarged. An immense movement is extending life and well-being everywhere. Peoples daily become better acquainted with one another, and mingle more freely with one another. The world itself hardly suffices longer for our activity. Hence the many international understandings for administering with uniformity the common interests of the civilized world. Agreements, which already apply almost universally, regulate telegraph systems, the mails, railroads, weights and measures, the publication of tariff laws, industrial and literary property.

Tentatives in the same line are making to unify commercial law in several of its essential elements. Why should it not be the same with money, that instrument which is international *par excellence*, the one upon which we are all the most dependent?"

These words will serve as a text for the following paragraphs.

Every careful student of contemporary things must be impressed with the rapidity at which the world is becoming smaller. No two nations on earth are in effect so far apart to-day as were New Hampshire and Georgia when our Union was formed. This is why the growth of great states in territory and in the sweep of the central power in each is found to be, for the most part, safe and healthful as well as inevitable. In the United States, the general government now exercises authority which the stoutest Federalist of 1789 would have shuddered to foresee, yet does this with the approval of all.

It is not usually observed that the same force which shakes so many different nations into one, and consolidates so many individual nations, is compelling greater intimacy on the part of states which still remain governmentally separate. Even the mightiest sovereignties on earth cannot resist it. We have here the secret of the extraordinary advance which the science of international law has recently made. It is cultivated more than ever. The law of nations is viewed more than ever before as law proper, and its devotees cherish a project, which will never sleep until realized, of an international commission, a world court or world congress, for the trial of international disputes. Not only are sections giving way to nations, but nations

are becoming one. We are hastening to a veritable "parliament of man," a "federation of the world."

The condensation of population upon our globe introduces a new necessity for conscious action by men in the direction of their greatest affairs. As civilization advances, the Power above takes man more and more into his counsel in shaping it. Idle trust in the so-called natural laws of social growth was once not so unsafe; but now the crowding and jostling occasioned by the density of society demand all possible thoughtfulness on men's part. Grave problems arise that once had no existence. They will not down, nor will they solve themselves.

The formation of an ecumenical postal union, in 1863, 1874, and 1878, was one long and benign step in this development. If we mistake not, the next, equally imperative, and destined, when taken, to be viewed as equally advantageous, will be the practical recognition of money as a matter for international agreement and action.

How splendid an achievement it would be if the nations of Europe and America would provide themselves with a few gold coins for use in common! No one can measure the good which would hence arise from the extra ease with which accounts, prices, and statistics pertaining to one of these countries would then be understood by the people of other countries who had occasion to examine them. The perplexity which proceeds from the absence of such a common price denominator is a great barrier to international trade, making it a sort of occult science, wherein those specially skilled profit at the cost of the ignorant.

Travellers as well as merchants would be saved from much trouble and loss by an international coinage. If it were introduced, a man from one country, journeying in another, would not be put to the necessity of visiting a bank at once on his arrival, in order to supply himself, at much expense, with the special money of the land.

So easy would this reform be, at least in countries using gold as fundamental money, it is surprising how little demand there is that the thing be done. The decimal system has been adopted nearly all over Europe, and, in money, also in the United States. Not merely the Latin Union, namely, France, Belgium, Switzerland, Italy, Greece, and Roumania, but Germany, Austria-Hungary, and Russia as well, have so far introduced the decimal element into their moneys as, with but slight changes, to make possible certain highly convenient monetary unities among them.

The twenty-franc piece is already at home, under one name or another,—so many "francs," "lire," "drachmas," "lei," or "florins,"—throughout the Latin Union, in the new State of Congo, and, as a trade coin, in Austria. Just to be odd, one would think, Austria is making her new twenty-crown piece a little heavier than the twenty-franc piece, putting into it 6.09756 grams of fine gold, instead of 5.806 grams. It is a pity that this coin should not have been made to agree at least with Holland's ten-florin piece, which contains only 6.048 grams fine. The Spanish piece of twenty-five pesetas is precisely equal in value to one and a quarter of the twenty-franc

piece. Take about six cents' worth of gold from the English sovereign, and augment by about the same sum the German twenty-mark piece, and each of these, also, becomes a twenty-five-franc piece, exactly equalling in value one and one-fourth of the twenty-franc piece. Our five-dollar gold piece could be reduced to this same value by removing some two and a half per cent. of its fine gold. The Scandinavian Union would have to enlarge its twenty-crown piece but a little to make it equal to thirty francs. Can it be that such vexing diversity in the moneys of neighboring peoples will be tolerated much longer, when these trifling changes would introduce practical parity in moneys throughout the gold-using world? It will perhaps be said that the changes proposed would necessitate corresponding alterations in other gold coins. True, but the main modifications required would relate to the minor coins, of ten marks, ten crowns, etc.,—coins which ought in any event to be melted, making way for silver money, to circulate in the form of certificates. This measure, which would strengthen immensely the gold holdings of national banks and treasuries, has everything to recommend it, and not an objection to it would be offered by any one, provided the change could be made general.

A subject no less important, to which attention has not so frequently been drawn, is that of international gold and silver certificates. How insane it is that whenever exchange between Europe and America, for instance, reaches a certain figure, gold, in quantities more or less immense, must be carted to the wharf, placed in vessels, and, at great expense for freight and

insurance, carried across the ocean, only to be returned after a few months in the same expensive way! Not seldom the cost of re-coining is added to that of transportation. A million pounds sterling in gold, a sum which the Rothschilds frequently have to send from one nation to another, weighs eight and ninety-three hundredths tons. The same amount in silver would, at the present market value relation between the two metals, weigh a little over one hundred and ninety-six tons. I have never tried to compute the expense of this continual movement of the precious metals, but it is certainly very great.

And it is needless, at least among nations so highly civilized as those of Europe and North America. All of it might be saved by an arrangement on the part of national treasuries or banks parallel with that between the principal banks of New York, by which, in times of crisis, they utter clearing-house certificates. Such an arrangement, once become fixed and popular, would, I believe, be able to continue even through a war.

The thought at this point, so far as concerns Europe and America, relates mainly to gold certificates, because in these lands gold is now the sole means of ultimate payment; but there is no reason why much use should not be made of silver certificates as well. To be sure, they would not serve in the final settlement of balances, because silver is practically a commodity. Such papers would be like Standard Oil and other certificates used to mobilize heavy goods. But the international traffic to which silver is subject is so very important that the passing of these warrants from one

side of the ocean to the other, in lieu of the metal itself, would effect great saving to all.

The necessity for international agreement in the matter of money is further seen in what occurs when, for any reason, a nation gives up the use of metallic money, and goes over to a *régime* of irredeemable paper, as we did in the civil war. One versed in political economy easily understands that such an act by one nation, liberating nearly all its gold and silver money and sending it abroad, elevates prices and cheats creditors in all the nations receiving it. That this occurs silently, and is always accompanied by certain phenomena in themselves felicitous, such as the lightening of producers' debts and taxes, does not, after all, make it desirable. It is the less so because the nations relieved enjoy the rise of prices only to suffer the reverse movement, sure to come whenever the nation first concerned resumes specie payment. There can be no doubt that the return to specie by the United States in 1877 and 1878, calling vast sums of gold from Europe, occasioned some part of the industrial distress that was experienced in England, Germany, and France during those years. Since about that time there has been, among the nations using it for money, a struggle for gold such as never occurred before. It has not yet ceased, and, unless some scheme can be devised for the rehabilitation of silver money, will not cease. About a billion dollars of gold money in excess of their previous holdings has been called for by the nations of the West since 1873. The United States required a great part of this. Germany and Italy also had to stock up with the yellow metal.

More recently, Russia has been buying it far more copiously than most surmise. That country now has a supply of about $481,600,000. Roumania has purchased largely for several years. For some months Austria has been buying, in order to range herself with the gold monometallic lands. The agency of Austria appears in the exportation of gold from the United States in 1892 and 1893, most of which left us at moments when foreign exchange was below the gold exporting figure, showing the artificiality of this current. Austria had agents in New York, who, directly or indirectly, secured the exportation of gold by offering for it special inducements of some kind.

The writer views this efflux of gold, not as having resulted from the return of American securities held in Europe, but as the cause of that. There may be a few Europeans who doubted the continued gold solvency of the United States. Such persons were very rare, and sent home but a small proportion of the valuable papers that reached us after the Baring failure. The secret of both the gold outflow and the paper inflow lay in the determination of the European powers and great banks to be well supplied with gold, which could be carried into effect only by special measures. Our abnormally large importation of commodities during January, 1893, is to be accounted for mostly in the same way.

Still another momentous evil, due to the fact that the world's monetary arrangements lack all coördination, is the fall in general prices which has been taking place since 1873. As I have elsewhere observed, many writers of great intelligence fall into a

curious confusion of cause and effect upon this point, identifying fall of general prices with intrinsic cheapening of commodities. The decline in prices now going on in itself marks no advance in civilization. One may indeed speak of a fall in prices as a *sign* of economic advance, which, under the world's present economic system, it often is, but never as itself an *element* in such advance, for this it is not. That many manufactured articles have long been decreasing in intrinsic cost is a great blessing, and articles of this class would doubtless have gone down more or less under an ideal system of money. But it was not necessary that general prices should fall; and this fall, I maintain, has been an absolute and unmitigated curse to human civilization. Mark, it is not low prices which I condemn. Low prices, once established, are as desirable as high. That is to say, the words "high" and "low" in respect to prices are not absolute, but relative terms. The continual *fall* of prices, the act of sinking, is the accursed thing. None profit from it but such as are annuitants without being producers; and we may be sure that no civilized state is going to legislate to keep prices falling, when it is once seen, as it must soon be seen, that the fall injures all but the very few unproductive people who live upon their incomes. Bankers and money-lenders, as such, are not interested to have prices fall and the value of money increase. What enriches bankers is lively business, plentiful trade, demand for capital, high interest,—phenomena which never accompany appreciating money, and in the nature of the case cannot do so. In the absence of wars and all such acute

causes narrowing the demand for loanable funds, the present abundance of these in all directions, and the consequent low rates of discount, ought to be read as indubitable signs of a morbid paucity of money in the general circulation.

All are glad, certainly, to have the costs of things become less and less. This process has been going on since 1873. Had this alone occurred, no one would complain. There are two proofs that this is not the whole of what has been going on. Intrinsic costs were falling between 1848 and 1873,—falling as rapidly as they have done since 1873. But at that time prices were rising rather than falling, and it was a period of extraordinary prosperity everywhere. The other evidence that the fall in the intrinsic costs of things since 1873 has had an occult, baneful accompaniment of some sort, is as follows: Falling costs imply prosperity. The signs of a *régime* of falling costs are high interest and dividends, good wages and profits, happy merchants, manufacturers, bankers, and workmen, few failures, few strikes and lockouts, rapidly multiplying industrial undertakings, and rapidly increasing wealth. This is not a picture of men's economic life for the last twenty years. Costs have fallen, doubtless, but the fall in prices has not consisted solely or mainly in reduced costs.

Just so, an advance in prices may mean an advance in costs, as is generally, or often, the case when prices are put up by tariffs; or it may mean merely an increase in the volume of money, without increase, or even with decrease, in costs, as was the case after 1850.

I have nowhere seen these distinctions properly traced; and because they are not heeded, people of much intelligence often talk absurdly upon this subject. One class hails with joy a rise of prices, whatever its cause. When prices decline, many imagine that it must mean a lessening of the effort necessary to get commodities, and they raise hallelujahs accordingly.

The dislocation of prices is infinitely the most important aspect of the silver question. The trouble is intensely real. It is at once economic and moral in nature, hindering productive investments and exchanges, and necessitating a measure of injustice in a vast proportion of the exchanges which do occur. The malady affects all alike, Europe as well as the United States, Germany and Austria no less than England and France. How long shall we let it continue?

Still more recondite is another evil from which modern society suffers greatly. I refer to the rupture of the industrial world into monetary hemispheres by the demonetization of silver which began in the year 1873. The result is substantially a new phenomenon in human history. Before 1873, silver as well as gold had practically been for centuries full money in all the important nations. After 1816, to be sure, silver was not full legal tender in England; but for all this, payments could be made to England in silver just the same, because France, near by, would receive this in settling her balances with England, and return gold.

This new state of affairs is a very serious one. Nations in the gold group can no longer trade freely with nations in the silver group. There is between the two

worlds no mint par; that is, no stable par of any kind. As to trade, these two sections of humanity stand to each other in precisely the same relation which a nation using irredeemable paper money occupies to other nations. Under such circumstances, it can never be known how much of the money of one country will equal a given sum in that of the other at the moment when the trade is consummated or the goods are delivered. An element of specially distressing and perplexing risk thus enters into all such transactions rendering them a veritable form of gambling. It is well known how greatly this curse is affecting England's trade with India, occasioning widespread bankruptcy and strikes without number. Lancashire, usually so prosperous, has become, in consequence of its disturbed commerce with India, the scene of nearly universal distress and complaint. No one denies this, but the remedies which various parties suggest are very diverse.

What has been written and said upon this subject, relating so exclusively to its British phase, causes many to overlook the fact that friction of the same sort is felt all over the world wherever countries whose ultimate money is gold seek to trade with countries whose ultimate money is silver. The United States too, is hampered by this infelicity. It stands with the tariff as one of the reasons why our trade with Central and South America, Japan and China, is so insignificant.

Perhaps the worst victim of the disease at present is Mexico. The Mexican delegates at the Brussels Conference submitted a long paper in which they re-

hearsed the distresses which have come to their country through the loss of their old-time freedom of exchange with the gold-using world. The picture which they drew was very dark. They did not complain of a loss in the purchasing power of silver, for net loss of this kind in the silver-using countries there has been none, but bewailed the uncertainty of the value of silver from day to day in terms of gold, which would, of course, be the all-important consideration in their foreign trade. I transfer to these pages a table which these gentlemen presented to the Conference, showing the number and the sweep of the variations in Mexican exchange on London for the two years 1889-90.

	1889.				1890.			
Month.	Maximum.	Minimum.	Variations	No. of Variations.	Maximum.	Minimum.	Variations.	No. of Variations.
January	35¾	35¼	½	7	37⅝	37⅜	¼	8
February	35⅝	35	⅝	6	37⅝	36½	⅛	9
March	35½	35⅜	⅛	1	37⅝	37¼	⅜	15
April	35⅜	35¼	⅛	1	39	37⅛	1⅞	13
May	35 9/16	35⅜	3/16	2	39¾	38¼	1½	8
June	35⅞	35¼	⅝	2	41½	39¼	2¼	11
July	35⅞	35⅜	½	3	42¼	40¾	1½	8
August	35 11/16	35⅜	5/16	3	45½	42¼	3¼	9
September	36⅛	35½	⅝	6	45⅝	44	2⅝	10
October	37⅞	35⅞	2	6	43¼	40¾	2½	17
November	37¾	37⅛	⅝	11	41⅝	37	4⅝	14
December	37⅞	37¼	⅝	12	41½	39¼	2¼	13

There are those, I know, who fancy that the precise difficulty here under survey must be temporary. They think that silver will "find its level," and that then it will be possible to forecast the course of exchanges between the different parts of the world, just as be-

fore 1873, or as between Europe and America now; the rates of exchange being sometimes higher and sometimes lower, but always oscillating back and forth past a fixed par. In my judgment, this thought is entirely illusory. If silver is left a commodity, there will never again be a fixed par between it and gold, any more than there now is between iron and gold, or lead and zinc. Not only so, but, as gold becomes more scarce, the gap between the units of the two moneys, gold and silver, must slowly and irregularly increase. It is not a pleasing prospect, for one who believes in the progress of human civilization, to see the two great sections of humanity thus held asunder by a gulf in their monetary relations, not impassable, indeed, but passable only through deepening storm and tempest.

The outlook is the darker because the portions of the earth thus unnaturally forced apart are precisely the ones that ought to be trading together most freely. Many, of course, believe in erecting trade barriers between such different nations as produce the same things, but you must search far to find a man who does not favor closer trade between the nations of the southern world and the nations of the northern world. Now, this classification is almost exactly the monetary classification to which I have referred. Unless something can be done to close the chasm spoken of, it will yawn more and more as the years pass. It will be worse than a Chinese wall between those monetary zones, having more effect to prevent trade and the accompanying influences of civilization than the highest tariffs of which protectionists ever dreamed.

It is obvious that these evils can never be cured while nations continue upon their present *laissez-faire* monetary basis. So long as each nation acts for and by itself in these matters, society is inevitably a prey to the afflictions which have been enumerated; while, in respect to the last two of them, the fall of prices and the splitting of the world into diverse monetary camps, things are going from bad to worse.

Two parties make light of all efforts to bring nations together in monetary union. The ultra gold monometallists do this. They pretend that there is gold enough in the world, and deny, or incline to do so, that any such strife for this metal as has been alleged is going on. We notice, however, that at present none among the advocates of gold monometallism have the temerity to demand, as used to be done ten years ago by a few, that silver should be demonetized universally. But why ought not this to be done, if there is gold enough? Also, I have yet to hear of any gold monometallist who has dared, within the last five years, or would now dare, to recommend the United States, Germany, and the Latin Union to demonetize their full legal-tender silver. But again, why not, if there is gold enough? The most enthusiastic gold monometallists thus virtually admit, as regards the last and worst of the evils of which we have spoken, the powerlessness of what they recommend, to effect a cure. For the monetary chasm which gapes between the industrial world that uses gold and the industrial world that uses silver they provide no bridge.

But it is equally impossible, with the means favored by them, to remedy that other bane which we men-

tioned,—the bane of the fall in general prices. There is not, within the lands which now use gold, gold money enough to prevent a most serious and distressing fall in general prices. If only the exchange function of money be had in view, there is, doubtless, gold enough. There is sufficient to "go round." You can have gold in plenty for all exchange work, if you take each coin and divide it in two. Then the gold at present with us will go twice as far as now, relieving us of all difficulty in effecting whatever exchanges we wish to effect. But what would be the influence upon prices of such a division of coins? I leave the reader to imagine. Of course, it would be confusing and disastrous in the extreme.

Another class of influential persons who mock all attempts to secure an international monetary agreement are the ultra silver men, who desire free coinage by the United States alone. Among these are no doubt some who wish this result quite regardless of consequences, desiring only to make money more plentiful in order to render easier the unpleasant business of paying debts; but it is unfair to charge the whole class with such a motive. Many, if not most of them, sincerely believe that the free coinage of silver by us, independently of other nations, would not lead to the expulsion of our gold. They think that what France accomplished between 1803 and 1873, in maintaining for all Europe the practical concurrence of gold and silver money at a value-relation between the metals of fifteen and a half to one, doing this both during the penury of gold before 1850 and during the affluence of gold after that date, the United States could much more easily accomplish

to-day. Not only do many thoughtful Americans believe this, but as well several of the ablest European students of monetary science, such as Henry Hucks Gibbs, Moreton Frewen, and Sir Guilford L. Molesworth. It is easier to laugh at this opinion than it is to refute it.

These thinkers make much of the fact that the abundance of money metal, including silver, produced since 1873 bears a much smaller proportion to the quantity in existence at that date than did the new money metal brought to light between 1850 and 1870 to that which existed just previous to 1850. Strong as this consideration is, I cannot, for my part, think these gentlemen right in their conclusion. They seem to overlook three important considerations: first, the hostility and discredit into which silver, rightly or wrongly, has fallen; secondly, the relatively low cost at which silver can now be produced; and thirdly, the intense fight for gold which is now going on. These facts had no parallels at the time when Michel Chevalier wished to demonetize gold, and they are of such moment that neither the United States nor any other nation would be wise in undertaking, alone, to reinstate silver. The result of such an effort would be, I think, that the nation making it would simply bid farewell to the gold-using section of mankind, and go over to the users of silver.

Were we, in our present condition, to institute the free coinage of silver, the first consequence would be the hegira of our gold, leading to dreadful stringency, and a much greater fall in prices than we have thus far seen. This agony being over, as the mints began to

turn out great piles of silver dollars, to circulate either directly or by proxy, prices would slowly rise to the Mexican level. We should have left Europe in order to join Mexico, Central and South America, Japan and China. I can see how high-protectionists might earnestly desire such a result, for the wall which the change would erect between Europe and America would be more impassable than any that McKinley tariffs could create. This would be bad enough, but, from the point of view of the advancement of civilization, it would not be the worst effect. The fall of prices in the countries still retaining gold would of course be checked for a time. These countries would receive our gold, affording them great temporary relief. Only temporary, however. After a time, the struggle for gold would be on once more in the gold-using group, just as it is now; for that gold is destined to become more and more scarce, not only relatively, but at last absolutely, seems to the present writer as certain as anything future can be. The distress of falling prices would, in the course of years, lead some other nation, at whatever sacrifice, to incur the distress of changing its basal money from gold to silver. Then another and another would do the same. If this process must be gone through by one nation at a time clear to the bitter end, civilization will be thus hindered more than by the permanent continuance of the militarism which now burdens Europe.

No one nation can solve this serious problem. It requires international action. The only scheme by which the difficulty can be surmounted in anything like a permanent manner is international bimetallism,

which I believe to be as perfectly feasible as its theoretical operation is simple.

A great many admit the troubles enumerated above, which in my judgment bimetallism would cure, but do not wish to go so far in the way of remedy. Hence the innumerable *soi-disant* palliatives short of bimetallism that are offered for those difficulties. It would be tedious to enumerate these, interesting as many of them are from the ingenuity which they display. But it is to be remarked that none of these partial remedies could be carried into effect without international action, and that the concert which most of them would require would be of a much more intricate kind than that called for by out-and-out bimetallism. Compare, for instance, the simple provisions of bimetallism with the complex, minute, diverse, and numerous specifications of the pro-silver scheme put forward the last year of his life by the late lamented Professor Soetbeer. It were better to adopt at the outset a plan whose operation would be thorough. The best which could come from any superficial measure would be that it would soon reveal its inefficiency, having meantime committed the nations to common action in monetary affairs.

IV.

THE MONETARY EXPERIMENT IN INDIA.

ON the 26th of June, 1893, the Government of India, having obtained the permission of the British ministry, indefinitely suspended the free coinage of silver in their dominion. The purpose was to give a fiat value to the rupee, higher than that of the silver it contains, making it, if possible, steadily worth 1s. 4d. in sterling, viz., 1–15 of a gold sovereign or 32.44 cents in our money. It was expected as an inevitable element of this plan, ultimately to open the Indian mints to gold and to make the metal a legal tender in India, paying it out when demanded; but this part of the program, whose execution will require India to possess no less than £15,000,000 in gold, was, so far as convenient, kept from public attention in order not to accent that appreciation of gold which made action necessary.

The natural history of the change thus attempted deserves study especially for two reasons. It illustrates the impossibility of a strictly national money; showing that the world's money, like the world's air, will form a certain more or less perfect unity in spite of all national enactments, every essential alteration in

the status of money in one nation producing its necessary consequences throughout the world. Thus, this decree, resolved upon by seven men ruling the Queen's Asiatic Empire, was not only occasioned by past and prospective legislation in remote lands, but itself, when promulgated, took instant effect on the other side of the globe, closing mines, making troops of laborers wageless, bursting banks, convulsing trade, producing in some respects the most distressing monetary panic on record, and convening the American Congress in extra session.

The other reason why India's recent monetary history is peculiarly interesting is that it sets in clear light a very deplorable result of the demonetization of silver, to which thinkers in the United States have insufficiently attended, viz., the destruction of a fixed par of exchange between the portions of the world using silver as fundamental money and those using gold alone in this character.

Till 1873, that is, so long as silver was full money on the continent of Europe, exchange processes between India and Great Britain were as simple and easy as they are now or ever were between any two separate sections of the earth. The fact that silver had been since 1816 but a limited legal tender in Great Britain was of no consequence in this regard, since the two money metals bore in London as at Paris the almost perfectly stable value-relation of 15.5 : 1, which was in France the legal value-relation of the two metals. There was, therefore, between the money of London and that of Calcutta practically a fixed par, as there is to-day between dollars and sovereigns, rates

of exchange oscillating in the one direction or the other from this par, as the balance of trade might swing, but never beyond the percentage required for the shipment of specie, and always in a way more or less calculable beforehand according to the season of the year. Merchants in one country could place orders for the others' products long beforehand. Contracts might be in gold money or in silver, in sterling or in rupees indifferently, for it could be foreseen almost to the penny how much a sum of either would mean in terms of the other at the date when they were to mature. Until 1873 nothing but war, panic, or other abnorml circumstance ever interrupted this beautiful condition of the India exchanges.

After the demonetization of silver, in 1873, all this was changed. The tie that had bound the two metals at the relation in value of 15.5 : 1 was gone. Nothing like fixity of par between the East and the West has since existed. The London trader can no longer with safety offer former or any silver prices for Indian products, since he cannot tell a day or an hour beforehand what that sum of silver may soon equal in gold.

Merchants in India are in like case if they wish British goods. In a transaction of magnitude, to offer any price in gold is to incur the risk of ruin. In fine, trade between Great Britain and India has become almost a game of chance.

As a consequence, the export of British manufactures to India and other silver countries suffers serious check, and articles of the sort once procured from England have been coming to be manufactured in

India itself. In many lines India has not only been supplying her own people but also exporting liberally to China, Japan and other silver-using realms.

In 1876 England sent to China, Hong Kong and Japan 29,838,495 lbs. of cotton yarns, having a value of £1,272,008; in 1886 she sent thither but 26,930,400 lbs., at a value of but £900,846, a diminution of not far from ten per cent. in quantity and 33⅓ per cent. in value. The export to these countries of goods other than yarns declined similarly but in rather smaller proportions. So heavily has England lost in cotton trade to the East that her total world-export of these goods has for many years tended to diminish rather than increase. The British Gold and Silver Commission of 1886–8 published in its report a great number of almost startling statistics bearing upon this, all to the effect that the new friction in exchanging with silver countries introduced by the demonetization of silver has caused English manufacturers prodigious and incalculable loss of Oriental trade. Bombay cotton industry has thrived at the expense of Lancashire, Calcutta jute manufacture at the expense of Dundee, and the India wheat trade at the expense of English and American farmers.

Were it likely that India in taking up most of the manufacturing lost by England has gained from the transfer so much as England suffers, the English would perhaps be philanthropic enough to acquiesce. But this is probably not the fact. Most Englishmen, at any rate, believe that it would have been better for India as well as for England, in case the ancient conditions of exchange had remained, for England to con-

tinue supplying the whole Orient with manufactures for some time to come.

Quite akin to the hindrance encountered by eastern trade due to rickety exchange, is the bar, from the same cause, to the loaning of capital by England in India. On all old loans there has been tremendous loss. Testifying before the Royal Commission just referred to, Mr. P. F. Tidman mentioned the case of the Singapore Dock Company, the English stockholders in which lost 20 per cent. on their investment through the rise of gold after 1873, though the undertaking was so successful that in Singapore its shares brought a premium. The instance is too mild to be typical. Of the millions upon millions of British capital invested in the East before 1873, the great majority has shrunk nearly one half in gold value, banks and commercial houses holding such assets having to write them down accordingly.

Past losses of course tend to discourage loans, but this effect would soon pass away were it not for present and future darkness touching the silver value of gold. "You cannot," says Mr. Tidman, "get a penny of English capital to invest in a silver-using country so long as the uncertainty between gold and silver remains." Of the British capital invested in the East long ago, much is being withdrawn, its owners preferring to lose half rather than the whole. All this is of course an extreme misfortune, both for the capitalists who would be glad to lend were it safe, and for the progressive business men in silver lands who would thankfully borrow if it were possible. Such friction amounts to a dreadful check upon the progress of civilization.

This ceaseless up and down of Indian exchange on London consequent upon the rise and fall of gold, naturally excruciated the Indian Government. This Government has yearly to pay enormous sums in England to discharge its gold obligations, and these obligations were made heavier or lighter by whatever elevated or depressed the silver price of gold.

Sir David Barbour, then the financial member of the Indian Government, said in 1893, discussing the necessity of reform in Indian finances: "If we budget for the present deficit of 15,951,000 rupees and exchange rises one penny, we shall have a surplus, if it falls a penny we shall have a deficit of more than three crores;[1] if we impose taxation to the extent of one and a half crores of rupees, a turn of the wheel may require us to impose farther taxation of not less magnitude; another turn and we may find that no taxation at all was required."

It will be observed that the particular infelicities thus far mentioned, viz., those springing from lawless exchange between England and the Orient, were due not to the appreciation of gold as such, but merely to the instability, the constant change, of its value in terms of silver. Had gold fallen, not risen, or had it displayed but a tenth of its actual rise, the evil of fluctuating exchange might have been just as serious as it has in fact been. This trouble originated solely in the circumstance that, owing to the desuetude of the French Mint Law, and the absence of any other such legislation, no one can now know on any day how

[1] Viz., of rupees: a crore being 10,000,000.

much a grain of either precious metal will to-morrow be worth in the other.

The appreciation of gold, as distinct from its inconstancy of relation in value to silver, has begotten, in the relations between Great Britain and India, another family of woes, which we proceed to survey.

In 1873-74, before the rise in gold began, the amount remitted by the Indian Government to England to meet gold obligations was £13,285,678, which, as the rupee would exchange for 1s. 10.351d., was represented by 142,657,000 rupees. During the year 1892-93, the amount remitted was £16,532,215, which at the average rate of exchange for that year, viz., 1s. 2.985d., required a payment of 264,784,150 rupees. If this could have been remitted at the exchange of 1873-74, it would have needed only 177,519,200 rupees, a difference of 87,264,950 rupees. At least 87,000,000 of these extra rupees which the Indian Government had to pay England over and above what would have been called for had the old rate of exchange remained, was a dead loss to the people of India owing to the appreciation of gold.[1] Sir David Barbour declares that this appreciation "has added to the Indian expenditure in two years more than four crores (40,000,000) of rupees." This sum has had to be raised by otherwise needless taxation, or by diverting public funds which were sorely needed for railways and other improvements in the interior of India.

Discussing the repeal of the Sherman Law before it

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[1] This entire statement is copied with slight changes from the Report of the Indian Currency Committee to the Rt. Hon. Earl of Kimberley, Secretary of State for India, dated May 31, 1893, p. 7.

occurred, Sir David said that that event might lead to a fall in the gold price of silver of even 6d. per ounce, or more, and that there might be no substantial reaction from the level thus reached. Such a fall," he added "would, it may be said with practical certainty, reduce the exchange to about 1s. per rupee, and involve the necessity of raising at least 66,120,000 rupees more than would be required by the Government of India to effect, even at the rate of exchange of 1s.3d. per rupee, a remittance of the amount drawn last year, viz., £16,530,000; while the payment of £19,370,000, which is the present estimate of the drawings for 1893-'94, would, at 1s.3d. per rupee, require 309,920,000 rupees, and at 1s. per rupee, 387,400,000 rupees, involving an increase of 77,480,000 rupees.[1]

The rise in gold confronted the Indian Government with new expenses in India itself. Its officers, civil and military, who receive their salaries in rupees, demanded compensation for the loss which they sustained by the increasing dearness of gold exchange. Many of these officers disburse most of their incomes in England, in supporting their families and educating their children, and in laying up for old age; and, although general prices in England have fallen one third, it is certain that the purchasing power there of given incomes in silver has been largely reduced. Indian service pensioners living in England receive their pensions in terms of silver, but must defray all their expenses in gold. Many retiring officers and missionaries are forced by the rise of gold to remain in the

[1] Report, p. 10.

East though they would gladly return. Private citizens and corporations in India employing Europeans have been obliged to advance their salaries to meet this sort of loss; and had the Indian monetary system not been changed, the government would have been driven to do the same. For this, too, of course, new taxes must have been laid.

If the changed relation in value which has arisen between gold and silver since 1873 had originated solely in silver, not at all in gold; in other words, had the fall of prices in gold countries consisted wholly in a lessening of the effort necessary to produce commodities and not at all in an increased difficulty of procuring gold, then, since silver has fallen in relation to gold just about as general commodities have, silver prices must have risen; in which case the furnishing of more rice, cotton, etc. to pay extra taxes would have been to the Indian people as a whole no hardship. The effort required in paying the old tax would have been the same as that demanded by the nominally higher new tax.

But this has not been the case. Silver prices have not risen. The rupee has not lost in general purchasing power,[1] much as it has lost in power to purchase gold and gold exchange. A given number of rupees'

[1] The Indian Currency Committee seem to think that of late there has been a slight tendency to a rise in prices, viz., loss in the purchase power of rupees. Report, par. 31. Even so, the steadiness of the value of silver in India is very remarkable. In China the metal has gained in value rather than lost. Upon this subject see in the Journal of the Royal Statistical Society, London, for Dec., 1893, an article from G. Jamieson, Acting Consul-General at Shanghai, in which it is shown as follows:

worth of Indian goods represents as much effort to-day as in 1873. The additional payments by India to England noted above have been therefore a dead loss to India, owing to the appreciation of gold, the standard of her foreign creditors and of her contracts with them.

Such, then, were the evils, present and waxing ever worse, which induced the Government of India to modify, if possible, its monetary system: the distress attending Indian–British exchange, checking both commerce with Europe and borrowing therefrom, and stimulating, perhaps unhealthily, Indian manufactures; and the rise in the value of gold, adding vast weight to the principal and interest of India's English debt.

It is worth our notice that not one of these afflictions had birth in any action by India herself. Each was thrust upon her by legislation in Europe and America. Her system of money, in itself, and also so far as concerned her relations to the silver world, was perfect. There was circulating medium enough, and,

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"1. As regards articles which are both produced and consumed in China, silver prices have on the whole tended to decline. There is a moderate rise in a few articles, principally food stuffs, but all over there is a decline of about 9 per cent.

"2. As regards articles of native origin exported to foreign countries, the silver price has not advanced with the fall of exchange. Prices on the whole are almost exactly on the level of the years 1870 to 1874.

"3. As regards articles of foreign manufacture or production imported for sale in China, the average price in silver has declined very considerably. The Chinese can now obtain their supplies at a less cost even in silver than they could twenty years ago by some 26 per cent. In other words, the purchasing power of silver has not declined in respect to any of the classes of commodities, and has even considerably increased in respect of the first and last classes."

except as affected by gold exchange, prices were exceedingly steady. The tangled lien binding India to gold-using countries produced all the trouble.

Also, India's monetary sorrows did not come from any impairment of the character of silver as a monetary metal, but from the new preciousness imparted to gold by western legislation. It is a noteworthy fact, though often overlooked, that, until very recently, if at all, silver has not fallen in value since 1873, while gold has vastly risen in value. The necessity for monetary revolution in India, so far from constituting any reflection upon the fitness of silver for use as full money, reflects severely upon gold. One should not, however, infer from this that silver alone is a better money than can be formed, by suitable provision, from gold and silver together, although silver's wonderful steadiness in value since 1873 powerfully re-enforces the consensus of scientific judgment,[1] based now upon metallurgical as well as upon historical considerations, that the value of this metal is less fickle than that of gold.

Still further, the desire for an alteration in India's money did not in the remotest degree spring from or represent the masses of the Indian people. Quite the reverse. Could they have voted upon the measure which was adopted, a thousand would probably have opposed it where one favored. Only the Government,

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[1] See Walker, *Money*, 254, note, citing Chevalier, *La Monnaie*, 171; Roscher, *Grundlagen* § 142 [cf. vol. iii. of his *System*, 344], Jevons, *Investigations in Cur. and Fin.*, 59 [cf. 311, where he thinks the question whether silver is as stable in value as gold to be at least debateable]; most remarkable, Ricardo, *Proposals for an Economic and Secure Currency*, sec. iii.

the European officials, and the people trading with gold lands wished a new order. To all others the old was perfectly satisfactory and for the best of reasons. However inevitable under the circumstances, the innovation grew out of no popular demand, but was entirely artificial in nature. The nervousness, discord and foreboding in respect to money so marked in all gold lands since 1873, have not touched silver peoples at all save in relation to their gold debts and trade.

Nor did the Indian Government itself wish the new procedure except as a "policy of despair." The correspondence between the Government of India and the Secretary of State, printed in connection with the Report of the Indian Currency Committee, shows that the Indian Government has repeatedly made to the Home Government in England the most anxious representations in favor of International Bimetallism, with Great Britain as a party. In the despatch dated Calcutta, March 23, 1892, the Governors say: "We are desirous, as we have always been, of aiding in the settlement of the silver question by International Agreement." These authorities have believed from the beginning, as they still believe, that only such an agreement can satisfactorily relieve the Administration and Trade of India. They have earnestly implored the Home Government to give up its attitude of hostility in favor of such. In the despatch from Simla, June 21, 1892, looking forward to the Brussels Conference, they plead:

"We fear that a refusal on the part of Great Britain to adopt the system of double legal tender may be fatal to an international agreement for the free coinage of both gold and silver on a suffi-

ciently wide basis; and we believe that a limited increase of the quantity of silver used as currency will exercise a very trifling influence (if any) in raising, or preventing a fall in, the gold price of silver, while it will be wholly without effect in the far more important matter of preventing fluctuations in the relative value of the two metals. We greatly regret this state of affairs, both because we believe that no other country is so deeply interested in, or would benefit so greatly by, a uniform standard of value throughout the civilized world, as Great Britain with her vast system of trade and the great extent of her finances; and because the final rejection of an international agreement for free coinage of both gold and silver will leave this country face to face with a problem of the greatest difficulty."

But the Indian Government found, as L. H. Courtney, M. P., a member of the Currency Committee itself, declares in a Note to the Report, that "The British Government is the greatest obstacle, perhaps the only substantial obstacle, to the establishment of an International Agreement," and was therefore compelled, against its will, as a last resort, to put up with the gold standard scheme.

No doubt, since the closure of Europe's mints to silver, gold monometallism has spread to one country after another by a perfectly natural evolution. But this in no sort shows that the evolution was wisely begun. The first brick in a row being knocked down, however foolishly, however unfortunately, the rest fall according to a beautiful law. When Chicago burned, the flames had evolution from house to house in the most scientific manner. Inoculate your system with cholera, and the poison, unless arrested, will cause your death by steps each logical to perfection. But in none of these cases does the inerrant march of

causation justify the first application of the force. Similarly, let the dominant commercial powers of the earth displace silver or gold from its function as final money, and feebler powers have no option but to follow, each succumbing with a promptness proportioned to its commercial advancement; but the rigor of this necessity proves instead of disproving the absurdity of the original step. The monometallist evolution since 1873, rational, logical, inevitable, relentless, even beautiful as an exhibition of economic law, is dumb over the inquiry why it was ever suffered to start. The fact is that neither in England, in Germany nor in the United States, the lands where the movement was inaugurated, was any legislator at the time awake to the stupendous significance of the act. In each of these countries the sole gold standard was adopted carelessly, either in ignorance or in neglect of the far-reaching, bitter consequences which have appeared since.

The point wherein the necessity that was upon India to change moneys damns monometallism is that India's case is by no means unique. In kind, all the griefs which move India to try and place her feet upon gold, press Mexico, all Central and South America, Ceylon, Mauritius, The Straits, Japan and China to attempt the same; and there is not an intelligent friend of the gold standard on earth who longer supposes that the world's gold stock can possibly be spread out so thin. The difficulty would not be, as often suggested, that our gold would not suffice "to go round." There is plenty of gold to go round if the coins are made small enough. The pinch would come in a fall of

prices more terrible than any dreamed of now, something like that which occurred about 1510, when a given amount of money would buy nearly twelve times as much in general commodities as to-day, hand workers' wages being eight cents a day, and a bushel of wheat selling for nine cents in our money. Gold monometallism is, then, in this dilemma: By the same categorical imperative that has prevailed in India, it is called upon to make itself universal, and it cannot become universal without absolutely insufferable results.

It is too early to say whether this new monetary scheme can be carried through. There is reason for much doubt upon the point. Indian traders with London like to beat up the rupee, wishing it always to purchase exchange for at least 1s. 4d., the more the better; while British dealers try to beat down the rupee, determined that it shall not command exchange for any more than 1s. 4d., the less the better.

Thus far Britain is victorious. Council Bills will not sell in London for so much as 1s. 4d. A rise of the rupee in purchasing power would of course lessen exports from India and multiply her imports, at once reducing the demand for means of remittance from London to the East and increasing the supply. This effect would perhaps go some way toward making the policy fail. It may fail entirely; it may half fail, neither bringing in the gold standard nor re-permitting silver coinage; or it may succeed.

If it fails quite, and the Indian mints are reopened for silver, India becomes happy again, but at the expense of English manufacturers and exchangers, who at once fall victims to all their old woes.

The Indian Government may prefer partial to total failure, refusing to reopen the mints though unable securely to shore the rupee to a gold standard. In this case the old ills must be endured and new ones be added. English-Indian exchange will continue irregular, and Indian exchange with the far East, now also made irregular, will remain so.

This intermediate state, neither one thing nor the other, in which the attempted reform succeeds just far enough to torment everyone and satisfy no one, is the position of affairs to-day (March 26th, 1894). The Bombay mill-owners fear ruin through the removal of their flourishing trade to China and Japan. These lands already spin much cotton. Unless the silver question is settled, they will spin more and more. They will also, in addition to much else, manufacture their own raw silk. Japan and China will thus oust England in still greater degree from her manufacturing industry, as they are already ousting her from her coal trade east of Suez.

Supposing the experiment successful, it by no means smooths much the monetary path which the Indian people have to tread. It merely relieves that part of their past perdition which had its source solely in crazy exchange. It establishes a par between British and Indian money. Some good must follow this, but much very desirable relief will not follow. The other phase of the disease, that, namely, which roots in falling prices, will be made more acute, because the gold necessary to render India's experiment a triumph cannot be sent there without another appalling drop in general prices all over the gold world. Supposing full

success, then, from this moment, India, in money matters, bids adieu to the silver world, where prices not affected by gold exchange are so beautifully steady, and joins Europe, Australia and ourselves in that *régime* of decadent values from which so much injustice and suffering have come. Whereas the exchange difficulty has concerned but small classes, the fall of prices will throw paralysis into every industry and taint with iniquity every outstanding contract throughout India. Sir David Barbour thinks that many professed friends of the new policy hope for its failure, dreading the new appreciation of gold which its triumph would occasion.

The people of this enormous territory make next to no use of savings-banks. Hitherto they have laid up their spare earnings mostly in the form of silver trinkets, such as necklaces, bracelets and anklets. Ten million pounds sterling worth of these is said to exist among the 300,000,000 inhabitants of India. As such silver wares could until now be readily turned into rupees in case of need, the custom has been to speak of one or more of them not as "worth" so many rupees, but as *being* so many rupees; people there making a much less sharp distinction between silver money and silver in other shapes than is common with us. The new legislation not only strikes away the old possibility of turning trinkets into money, but annihilates from ten to fifteen per cent. of the value of the trinkets themselves. In some countries so flagrant an attack by government upon property would beget a revolution.

The Indian Government's chief reason for its move

was that it would thereby escape the necessity of fresh taxation. It avoids this only in form. It in reality imposes upon India, in a roundabout way, somewhat harder for the natives to trace, a much heavier burden than is evaded. To save laying openly a tax of £2,-000,000, the population is indirectly mulcted by ten times that sum.

In the parliamentary debate of August 9, 1893, Mr. Chaplin introduced a memorial of the Industrial Association of Western India, which used as an argument against the proposed change the heavy burden of ancestral debt resting upon the Indian peasants. "Your memorialists observe that the large volume of the gold obligations of the Government is advanced to justify a departure from the trade in rupees. But they humbly suggest that the silver obligations of the peasantry are twenty fold greater and more important than the gold obligations of the Government, so that, while removing a minor evil, a greater one of the same nature but the results of which it is impossible to foretell, would be substituted." Spite of this protest, the step is attempted. This colossal debt of the ryot population has been swollen already by some ten per cent. and the injustice will become greater and greater as prices fall. No wonder the English Government, for having driven the Indian rulers to this, is boldly charged in parliament with "financial crime."

One is curious to see how the intensely monometallist ministry of Lord Rosebery[1] can henceforth face the bimetallists in public argument. The ministry has

[1] Lord Rosebery himself is thought to be less averse to bimetallism than some of his colleagues.

at last admitted the existence of grave monetary evils in the world, and, so far as concerns India, has sought and supplied a supposed remedy. To an extent never known before in one act of any government, it has "tampered with the currency," altering the standard of value in debts and trade for a population of 300,000,000 souls, a species of action which it has hitherto affected to abhor. It confesses the truth that proper legislation can establish a parity of value between gold and silver moneys, and that governments may sometimes be in duty bound to undertake this. The bimetallists may be depended on to make the most of these admissions.

If it continues, the new order will increase India's imports from England, but it will overthrow the thrifty manufacturing and export business which India has developed in recent years. It cannot but do something to attract European capital, yet the aid in this respect afforded by stable exchange will be largely offset by the fact that hereafter capital going to India must engage in producing goods for a falling market, a state of things which everywhere dissuades holders of wealth from investing it in productive undertakings.

It appears from the foregoing that India's new monetary *régime*, if it matures, will, while improving on the old in certain respects, be in others no improvement but rather the reverse; and that at best it must be merely a temporary make-shift, not a finality. Study of the experiment assures the writer afresh that no monetary peace can come to the world till silver is restored to its ancient place as full money.

V.

TARIFF REFORM AND MONETARY REFORM.

THE fundamental truth on which the policy of tariff reform is based is that the world of commerce is by nature a continuous unity. Any measure or system which tends to hedge it off into districts or departments is more or less artificial, and therefore, if justifiable at all, justifiable only on account of some temporary stress or other circumstance foreign to the normal order of society. Starting out from this principle, I desire to show that at the present time tariff reform depends upon monetary reform, and can never achieve its end in any satisfactory degree without a radical modification of the monetary conditions which now prevail.

It is universally admitted that since 1873 there has been an extraordinary appreciation of gold, or, what is the same thing, an extraordinary fall in general prices; but no one, so far as I am aware, has noticed what a decided forensic advantage this gives high protectionists in their argument against tariff reformers. In the

last presidential canvass anti-protectionists incessantly inveighed against the McKinley Bill on the ground that it had raised prices. They were able to prove that it had raised some prices, but that it had elevated prices generally they could not prove. On the contrary, the figures gathered by the Senate Committee showed that after the McKinley Act went into effect general prices slightly fell. This result was undoubtedly due in part to the inclusion of sugar in the Senate statistics; but the rise of general prices under the McKinley Act, even aside from sugar, was insignificant. Because of this, many believed, and still believe, that the whole outcry against the law sprang either from error or from a purpose to deceive voters.

What the McKinley legislation did do, beyond all question, was to enhance the intrinsic costs of things, to increase the amount of exertion which our people in general were having to put forth in order to procure a given number of pounds, yards, bushels, etc., of the various goods necessary to their subsistence. It did not raise prices in general, but it did raise costs in general. That few people saw this, was due to the natural but very perverse habit of confusing prices with costs, as if the two were either identical or always varied in the same direction. The tendency of a protective tariff to elevate prices had in this case been partially or wholly offset by the fall in prices involved in the appreciation of gold.

Had there been no appreciation of gold, that is, no downward movement in general prices, caused by paucity of full money in our part of the world, the consequence of the McKinley law would have been a

considerable rise of prices. The nature of that legislation would thus have been made so apparent that the victory for reform in 1892 would have been overwhelming and final. The nation's verdict in the matter would have been so decisive as to settle forever the question what sort of a tariff policy the United States should pursue. As it is, this cannot be said to have been the case. If any expect the lowering of our customs duties to be from this time an easy and certain thing, they are, in my judgment, much mistaken. The cause still has great obstacles to overcome, in which all possible help will be needed. It is extremely desirable that the fall of prices which obscures, and, unless stopped, will go on obscuring the inevitable effect of high tariffs, should be obviated if possible.

It is necessary to insist with extreme emphasis upon this difference between prices and costs. Pardon me, therefore, for dwelling a few moments longer over the dense and painful misunderstanding upon this point which afflicts many perfectly intelligent people. The statement is continually made that falling prices are advantageous, just what one ought to wish, as the signs of advancing wealth, comfort, and civilization. The proposition needs amendment. What is desirable is that the costs of commodities should decrease, but it is not necessary that this decrease should be accompanied by a fall in prices. It may even be accompanied by a rise in prices, as was the case after 1848.

All are glad, certainly, to have the costs of things become less and less. This process has been going on since 1873. Had this alone occurred, no one would complain. There are two proofs that this is not all

which has been doing. One is that intrinsic costs were falling between 1848 and 1873—falling as rapidly as since 1873. But prices then were rising rather than falling and it was a period of extraordinary prosperity everywhere. Another evidence that the fall in the intrinsic costs of things since 1873 has had a baneful accompaniment of some sort is as follows: Falling costs imply prosperity. The signs of a *régime* of falling costs are high interest and dividends, good wages and profits, happy merchants, manufacturers, bankers, and workmen; few failures, few strikes and lockouts, rapidly multiplying industrial undertakings, and rapidly increasing wealth. This is not a picture of the world's economic life for the last twenty years. Costs have fallen, doubtless, but the fall in prices has not consisted solely or mainly in reduced costs.

Just so, an advance in prices may mean an advance in costs, as is often or usually the case when prices are put up by a tariff; or it may mean merely an increase in the volume of money, without increase or even with decrease in costs, as was the case after 1850. I have nowhere seen these distinctions properly observed; and because they are not observed, people of much information talk very absurdly upon the subject. One class hails with joy a rise of prices, whatever its cause; another laments it, whatever its cause. So, when prices decline, many imagine that the decline must mean a lessening of the effort necessary to get commodities, and they utter hallelujahs accordingly.

It is quite conceivable that costs should go one way and prices another, that costs in general should fall, so that the community needs less effort year by year to

get a certain amount of satisfactions, and yet gives for those satisfactions a greater number of the units of money year by year. This is what was taking place after 1850. The reverse may also occur; that is, costs may increase or may remain stationary, and yet prices decrease. The McKinley tariff added to the costs of all or most things which it affected, but an unhappy appreciation of gold, to a great extent prevented this increase of cost—this addition to the effort necessary to obtain things—from taking effect in the form of higher prices. This obscuration of fact, I repeat, gave in the canvass, and continues to give, to the high tariff party a prodigious advantage in argument. There is no doubt that, in the election,[1] it secured for high tariff multitudes of votes. It keeps in favor thereof numbers of men who, but for it, would prefer reform, and it will continue to have this effect so long as the source of the error lasts. The condition producing the mistake ought to be cancelled by arresting the appreciation of gold through an increase in the volume of full or exportable money.

With this support which the appreciation of gold gives the protectionist as a debater, is closely connected the impulse toward protection with which it plies him if, as is usual, he is also a producer. The first of these considerations relates to logic, appealing to the mind; the second is economic, addressing itself to the pocket. Producers as such always like to see prices rise; and up to the figure where the increase begins to limit sales so as to lower total profit, they are sure to use their influence in favor of an

[1] Of 1892.

advancing market. When prices threaten or begin to fall, producers redouble their efforts as bulls. At such a time stock depreciates upon manufacturers' hands. Spontaneously struggling to avert this, they welcome any resource that bids fair to aid. Unable to compass their ends in other ways, they are moved to agitate for protection, which often, when it does not out and out elevate or stay the prices of goods, prevents them from falling as low as they would fall otherwise. If, as has almost always been the case in our country, manufacturers are foremost in framing the nation's fiscal policy, this is pretty sure to be protective, but it will be doubly so if they change it while prices are sinking.

That the consideration here touched has been most potent in the revived protectionist agitation which has swept over the world since the time when prices began to fall, hardly admits of doubt.[1] Since 1891, even New South Wales succumbs to this drift. The two phenomena are connected not alone in point of time, but logically, just as those of low duties and progress toward free trade after 1845 are connected with the rise of prices during the same period. As to times more recent, I have no hesitation in saying that had prices since the war been stationary or only slowly advancing, the rise in tariff rates so much bewailed would not only have been impossible, but would never have been thought of; and the painful effort which we are now making to rationalize our fiscal system

[1] The rise of trusts and other combinations of capital is due to the same cause. In times of falling prices, production is extra hazardous, and such as engage in it feel the need of some special shelter, defence, or insurance.

would have been unnecessary. Unless something can be done to remedy the world's monetary disorders, the manufacturing classes will continue as in recent years to be arrayed in almost solid phalanx against tariff reform, whereas, if the fall of prices could be checked, one principal motive now prompting them to such an attitude would happily fall away. This motive, now, has a certain justification, which even free traders must admit.

A special incentive just now operative in the United States spurs protectionists here to try and maintain high customs duties. It is the fact that we must retain our gold. In the East, nearly all our citizens admit this necessity, whatever their views regarding the tariff. As is well known, we produce several commodities which Europe must have, while few of our wants are of such a nature that we cannot, by sufficient expense, provide for them at home. By thwarting somewhat the disposition of people in Europe to settle with us in commodities, we compel them to send us more gold than they otherwise would. If the pressure for gold now so rife in all European countries could be removed, then this particular American ground for favoring protection would also be removed, and reform would be indefinitely easier in consequence. Otherwise the fight for gold cannot but plague us badly in settling a new tariff. Provided we are going to keep our gold, we cannot permit Europe too easily to liquidate in goods the debts she incurs on our side the ocean. The present Congress encountered this difficulty in its very first debate on the tariff, and will have to reckon with it at every step.

Should the Wilson bill become law, and immense new importations under it send all our gold to Europe, many who have voted for it would curse the day when they did so.

Tariff reform proposes to do much for the American farmer, and it will do much, but its benign effect in this way must be painfully restricted unless silver can be brought back to or toward its old-time value-relation with gold. Many wonder at Great Britain's obstinacy in refusing to do aught that might help on the rehabilitation of silver. The opposition of the creditor interest is commonly considered the cause of this. It is one cause, but there is another quite as strong—the determination of the entire non-agricultural population of Great Britain to maintain the present low price of wheat. This having resulted from the appreciation of gold, Lord Rosebery and his followers see that, were silver to be reinstated, wheat prices would considerably advance.

The appreciation of gold depresses the price of wheat in London by powerfully stimulating the importation of wheat from India. Let us recur to the days when gold was only fifteen and a half times as precious as silver. Suppose that then four shillings in gold, two rupees in silver, and a bushel of wheat were equal in value each to each. A Mark Lane dealer sends to India two rupees' worth of silver for a bushel of wheat, getting his rupees by paying four shillings' worth of gold. Now change the supposition: Gold appreciates, so that the two rupees will buy only three shillings instead of four, as previously. That is, silver has fallen in relation to gold 25 per

cent., and gold has risen in relation to silver 33⅓ per cent. Wheat, too, has fallen in relation to gold, but not so much as silver, so that, say, a bushel will exchange for three and a half shillings gold. Observe, now, how the appreciation of gold blesses our Mark Lane wheatmonger. The rupee or silver price of wheat in India has not changed. His two rupees will, as before, set a bushel of wheat going from Calcutta to London. He now, however, gets his rupees for three shillings gold, while his wheat brings him three and a half shillings gold. That is, he makes sixpence gold on every bushel. To aid simplicity I have made these figures gross and general and have taken no account of freight or exchange. But, though more or less inexact in detail, the supposition perfectly illustrates the effect which the dislocation of the old value-relation between the precious metals has had in filling London with Indian wheat. The profit, of course, does not continue so high as indicated, but is lowered by competition. This lowering comes about by a fall in the gold price of wheat in England, which not only more and more cuts down the London market for American wheat, but depresses the price of wheat to the remotest farm in the United States.

The correctness of the theory just stated is sometimes challenged on the ground that if it were correct the silver price of wheat would, through stimulation of the demand, have risen in India, which has not been the case. This apparent anomaly is easily explained. There has no doubt been a tendency to such rise, but it has been balanced by the counter-tendency toward cheapness put in exercise by the immense multiplica-

tion in India, during recent years, of railways and other facilities for easy transportation. In this round-about yet inevitable way, both the American market for wheat and the American price thereof are kept down by the appreciation of gold. A similar analysis could be given in relation to cotton, only here the British pressure in favor of low prices through dear gold is offset somewhat by the difficulty which dear gold gives the cotton people themselves in preserving their market abroad. Of this I shall say more presently. Meantime, it seems to me absolutely certain that the production of the two great staples mentioned can never be duly profitable in America till the gold price of silver is much raised; that is, the appreciation of gold checked.

Tariff reform sees still another powerful reason why silver ought to be brought back to a certain regular parity with gold. It is a reason of which we in America have thought little, but we cannot permanently ignore it. I refer to the lack of a fixed par, a mint par, between the gold-using and the silver-using portions of the world. The distress which the absence of such a par has produced in England is among the chief causes for the great increase of sentiment there favorable to bimetallism. It is found that trade between England and India has come to be little more than a game of chance. All the people engaged in it or acquainted with it pronounce its condition intolerable. We Americans have been accustomed to think of this evil as having little importance for us, but we are certainly in error. All parties are agreed that it is already desirable and must soon be indispensable to increase our

foreign trade. Some would promote this by subsidies upon steamship lines between our own and foreign countries. Others prefer the method of reducing duties. But no intelligent American will deny that in some way or other the exports from the United States of America must immensely increase if the prosperity of our country is to go on. A very great part of the new exports must go to the lands which have silver as the basis of their currency, as China, Mexico, Central and South America. We ought to be the principal purveyors of manufactured goods to all these regions. No other great manufacturing nation is so near them. Far too long have we been sluggish touching this important interest. Even the last election has hardly awakened us. When the matter is studied as it deserves to be, our people will not rest until they begin to utilize this gigantic possibility. Now the friction in exchange between the gold-using and the silver-using populations of mankind is about the worst conceivable barrier to the execution of this splendid scheme. It may seem a strong statement, yet I am of the opinion, after much reflection, that the demonetization of silver in 1873, annihilating all money par between rich and populous sections of humanity, sections which more than any others ought to be trading freely together because their natural products are so diverse, is doing more to repress commerce than all the tariffs in existence. This is why the exports from Great Britain to the East have for many years been either falling off or increasing at a snail's pace in comparison with the progress they ought to have made. Excepting a few writers for the London press, I do

not believe that an intelligent Englishman can be found who will not trace this loss to the crazy condition of exchange.

The same evil affects Mexico as well. At the Monetary Conference the Mexican delegates submitted a paper which gave impressive testimony to this fact. Among other documents which they laid before the Conference was a table illustrating the frequency and sweep of the variations in Mexican exchange upon London for the years 1889 and 1890. That table we have already presented, on page 65, but attention is again directed to it here.

Similar variations in exchange rates between the gold and silver portions of the globe are of course taking place at all points. Yet those are precisely the exchanges which are most important for the advance of human weal and civilization. The last fall in the gold price of silver has greatly aggravated this evil.

This obstruction of international exchange operates exactly like a high protective tariff, forcing nations to use at home what they could more profitably export, and produce at home what they could more profitably import. Capital and labor are thus driven into needlessly unremunerative channels, and the average welfare of men kept down. It was recently stated in Parliament that "eighteen cotton mills are at this moment being erected in Bombay and two in England." During the year between July 1, 1890, and June 1, 1891, nine factories were building in India. One hundred and twenty-five in all were then in operation there, with 24,531 looms and 3,351,694 spindles. There were then 110,000 Indian laborers engaged in

this industry, and they used 40 per cent. of the about 3,000,000 bales of cotton produced in India. Within ten years the number of hands has multiplied threefold, and the amount of cotton wrought by them more than fourfold. It is true that the import of woollen yarn into India from England still keeps up, but it does little more than this, and is mainly confined to the finer lines. Even if the establishment of this Indian manufacture involved no loss to England so far as her trade to India itself is concerned, which, of course, it does, she suffers vast loss in China, whither most of the Indian yarn is exported. In 1888-'89 India sent to China 101 million pounds of cotton yarn, having a value of $1,435,875. In three years the amount of yarn increased 50 per cent., and the value nearly the same. In the year 1890 the value of Indian commerce with Europe was $441,000,000, with an export surplus of $31,065,000. With the other countries of the world, India's total commerce was $187,338,750, with an export surplus of $81,783,750. Thus, while the centre of gravity of India's foreign commerce is in Europe, the centre of gravity of her surplus export is elsewhere. The surplus is particularly great with Ceylon, Japan and China. What is more surprising than these figures is that, spite of the heavy wheat trade just referred to, India's balance for 1890 with England taken alone is even passive, very passive, as she imports from England $188,591,250, and exports thither only $146,703,750, whereas from the rest of Europe, outside of Turkey, she imports but $16,376,250, while exporting thither $89,298,750, leaving a net export of $72,922,500. Her net exports to the silver-using

lands are singularly striking: \$6,307,500 to Ceylon, \$4,473,750 to Japan; \$43,072,500 to China.[1]

The jute industry, too, has of late years had enormous development in India. At the close of 1890, 160,275 spindles and 7,964 looms were devoted to this industry in that country, employing 70,000 laborers. Five hundred new looms are said to have been set up in 1891. Steam flouring mills have also been erected of late in Bombay. India would probably in any event become in time one of the great manufacturing centres of the globe, but it would, for the present, be to her advantage, could she trade freely with England, to purchase thence most of her manufactures. She would perhaps profit by the arrangement as much as would England herself.

India's active commodity balance, or, as we say, favorable balance of trade, is paid for mostly in silver, though that enormous country, which contains almost one-fifth of the world's population, trained through centuries to think of law and government as uncertain, and being, therefore, not in condition to utilize credit, absorbs enormous amounts of gold also. In 1890, 461[2] lacs of rupees in gold came into the country, but only two lacs went to the mint. The entire remainder the people hoarded or made into trinkets. Even the imports of the precious metals do not fully equate the surplus of commodity imports, the remainder being made up in London council bills.

Another movement dear to tariff reformers which is

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[1] These amounts in dollars are arrived at by reckoning rupees at 37½ cents.

[2] A lac=10,000.

mightily hindered by the rise in gold is the flow of free capital from rich countries to poor. That international commerce may be as beneficial as possible it is necessary that the most abundant resources from every quarter should be at the disposal of those in any country who are endeavoring to build up the industries in prosecuting which that country has special advantages. Incalculable is the aid which human progress has received from investments made by countries of abounding capital in less fortunate portions of the world. Such blessing takes effect at both poles of the transaction. If well placed, the loans pay richly those offering them, at the same time that the borrower countries receive a great boon. This is but the beginning. Wealth and production being stimulated both in the land that makes and in that which takes the loan, each becomes a better customer for the other, furthering its prosperity still more, and so on, in ceaseless round. Now, the destruction of a par in exchange between two countries with different basal moneys clogs the play of this benign principle, making interest inordinately high in silver lands and desperately low in gold lands, each side being impoverished for lack of a service which the other would gladly render could it do so with financial safety. The would-be borrower, in Benares or Delhi, hesitates to promise any rate per cent. in gold, as he cannot tell for a month, or even a day, beforehand what such rate will soon mean in silver, wherein every item of his income is told. The would-be lender, in London, Berlin, or Paris, disinclines to let his capital go for any rate per cent. whatever expressed in silver, since, were he to do so,

however high the figure might be, it might, when interest day came, mean in gold anything from 20 per cent. down to zero. It is clear that no bridge of normal and regular credit can be made to span a commercial chasm of this nature. No loans will be effected under such circumstances, till interest is so low on the gold side and so high on the other that both parties grow very rash. In other words, borrowing and lending amid difficulties so grave is no longer business but gambling.

In Mexico, as well as in India, the appreciation of gold, wrecking the old parity between gold and silver and turning foreign exchange into witchcraft, has had the same effect, of immensely stimulating domestic manufactures. The Mexican delegates at the Brussels Conference of 1892, made upon this point a statement which I beg leave to reproduce:

"If silver remains in Mexico in larger quantities than hitherto, productive employment for it must, perforce, be found. Agriculture will certainly be developed, but, considering the special circumstances of the country, we think that industrial undertakings will be preferred. The production of our own manufactures will cause a proportional diminution in the consumption of many European manufactures, and will in time end by completely superseding some of them. This consequence of the increase in the currency in Mexico is already beginning to be realized. For a long time we have had, if not many, yet for the most part very important manufactures of cotton and woollen fabrics, of paper, etc., and their number has been increasing the last few years. Recently, in October,[1] a manufactory of cotton fabrics of all sorts was opened at Rio Blanco, near Orizava, on the Mexico and Vera Cruz Railway, the importance and the probable producing power of which may be estimated by its having cost already about 5,000,000 piastres [about $5,000,000 in silver]. Besides this noteworthy

[1] 1892.

example, we often find in the newspapers accounts of the establishment of new manufactories of various kinds, also of metal foundries, some of them on a large scale, like those erected two years since at Monterey and San Luis de Potosi, to utilize our lead ores, which had been exiled from the United States by a nearly prohibitive import duty. Manufactories of soap, of Portland cement, and of many other articles have been introduced."

It is at this point that the far-sighted and patriotic among the advocates of free silver find their inspiration. Aware of the absolute necessity resting upon this country to extend its foreign markets, they would take advantage of England's folly in continuing under gold monometallism and would place the United States at the head of the silver-using group of nations, to do for them their manufacturing. "Let us break off commercial relations with Europe," they say, "if only we can establish such relations with that vast part of the world where manufacturing is either non-existent or inchoate, and must grow, if at all, with difficulty; and let us create for those teeming millions all their manufactured articles, taking in return those things which they can produce so much more easily than we." When men point out the prosperity that might come to our country through the introduction of such a scheme, to ridicule them betrays no intelligence. Their thought in itself is magnificent. In declaring that there is an opportunity by the means suggested to "dish" England in the markets of the world, they are quite right. If this could be accomplished without involving us in other difficulties, it would be the finest commercial *coup d'état* ever effected since trade began. So much reason attends the notion that it seems to me sheer madness to oppose to it a policy like Eng-

land's present one of stubbornly adhering to gold monometallism.

With that of the ultra-silver men falls in excellently the idea of reciprocity put forward by the late Mr. Blaine. This is very popular with those brought up to believe in protection, who yet see how badly protection handicaps us in certain directions. Were every custom-house in the land levelled and every customs officer dismissed, silver monometallism, or free silver, would still preserve protection between us and Europe, just as gold monometallism now has exactly the effect of protection between us and the silver-using world. No consistent tariff reformer can wish either of these policies to prevail. The only tariff reform that will go to the root of things, carrying out the proper theory of international commerce, must involve bimetallism, thus making the world, for trade purposes, into one unbroken total. A protectionist is naturally a monometallist: a silver monometallist if he wishes trade defences against Europe, a gold monometallist if he wishes commercial shelter against the rest of the world. But how a thinker who sees through and is inspired by the thought of world-commerce and the uplift of civilization inevitably consequent thereupon, can desire either of these monometallisms to exist passes my wit.

The suggestion just thrown out seems to me to indicate the proper method whereby to bring the two great monetary factions of our country into working harmony. Without some sort of a compromise in the matter, we shall be for an indefinite time to come at a hopeless deadlock over our treatment of silver. The ultra-gold party can never carry the day. Neither can

the ultra-silver party. Though either may win a majority for a time, too much life will be found on the other side to allow permanent victory. Let those who oppose free silver take more pains to show that they are not averse to a monetary system involving silver as full money, provided it can be so ordered as to make the basis of our trade, external and internal, perfectly solid. International bimetallism will certainly do this. We are not the vassals of the small class who live upon the interest of loaned money but produce nothing. Let influential men in the East more earnestly champion the cause of bimetallism, instead of continually casting umbrage upon it, thus showing aid and comfort to the party in England which is striving to maintain and increase the appreciation of gold. At best, doubtless, the more rabid free silver men will be intractable, but the course I recommend would break that party. Those determined not to Mexicanize the United States in respect to money would receive from the silver ranks allies enough to establish a strong and permanent hard-money majority in Congress. Let this country take an attitude against the free coinage of silver by the United States alone, but in favor of its free coinage in case all the great nations will join therein, and the bimetallists in the British Parliament will soon win the day there. The policy of all Europe will then become bimetallic, and monetary peace and prosperity be assured to the world for at least the next hundred years.

VI.

THE FUTURE OF SILVER PRODUCTION.

ONE most serious result of the Sherman Silver Purchase law was the abnormal stimulation of silver production. This has given people not acquainted with the facts an altogether mistaken notion touching the probable yield of silver mines for the coming years. Under the spur of the Sherman law the price of silver at one time reached $1.19 per ounce. Silver miners then expected it to go as high as $1.29, nor did this hope fade until the end of June, 1893, when the free coinage of silver was suspended in India. There was at the same time a lurking fear that the rise might be succeeded by another fall. In consequence, all sorts of mines have been worked, the poorest with the best. Waste "dumps" and low grade "dumps" have been diligently picked over or sorted to glean the bits of "pay" contained, and a large amount of silver placed on the market at a downright loss. It follows that the output for the last three years is no guide whatever in forming an opinion of how much silver we may expect, if mining is resumed, to see taken out in future. In

no likely case, probably not even should silver be coined freely at 16 to 1 by the United States alone, can our silver mines put out for the next fifteen years so large an annual product as since the Sherman law went into effect.

No new transportation facilities will be created in the silver mining regions for a long time to come. The extraordinary silver output since 1873 is due, more than to any other one thing, to the construction of the great Rocky Mountain lines, the Santa Fé, the Union Pacific, the Denver & Rio Grande, the Colorado Midland and their various branches. While the profits of mining did not enter appreciably into the motive for building our transcontinental railways, yet when they were once in existence it was easy to thrust out branches from them into any particular locality where "pay mineral" was found. Our present abundance of silver is thus an incident of that American enterprise which could not rest till the two shores of our mighty Continent were tied together.

The railways tributary to the silver industry are now trembling for their existence. Most of them are already in receivers' hands, and the rest may soon be. Whether such misfortune impends or not, they cannot in the near future be in any condition to undertake new construction. Indeed, they have not been for months past. Neither for love nor for money has it been possible lately to get one of them to extend its mileage in the interest of any mining district.

After it was known that the Creede ores were very rich, the Denver & Rio Grande Railway, already running within about fifteen miles of the place, absolutely

refused to extend its rails thither, and private capital had to make the connection and agree to take pay in freight. This little railway brought the Denver & Rio Grande $1,100,000 in freight alone in 1892, a very important part of that road's total earnings. If there has been such hesitation in the recent past, what hope is there of new roads now?

What may be called the "topographical conditions" of mining are becoming more adverse. The prospect of discovering new silver "camps" in the United States is exceedingly slight. Where silver occurs at all, it usually characterizes a district some miles in extent, over which it gives notice of its presence by many an "outcrop" or piece of "float," the meaning of which no trained eye can mistake. Most of the silver areas which have been specially productive of late were known long before they were worked, and there is probably not a square acre of accessible territory in the Rocky Mountains which has not been searched with all possible care for "floats." "Prospectors'" holes dot the mountains everywhere, and upon each formation that can possibly be thought argentiferous are the marks of gun-powder. Not an indication of the presence of "mineral" but has been explored. If new camps should be discovered, they will certainly be so remote as to make the cost of development to equal or exceed the reward. The production of the future must come mainly from mines or districts now known. But not only are many of these, and those among the richest, like the Comstock Lode, worked out; but the ones still productive, such as the Mollie Gibson, the Smuggler, and the Aspen, at Aspen, Col., and the mines

of Leadville, must henceforth be worked at a rapidly increasing cost owing to increasing water and depth.

Ore that runs less than 40 ounces per ton is usually classed as "low grade." "Good ore" runs from 40 to 100 ounces. All ores running over 100 ounces are "high grade ores." All but universally, silver ores grow poorer as the mines grow deeper. To this rule the exceptions are rare and marked. Even when the deeper ores show no important falling off in silver value, they are apt to prove more and more refractory until at last they do not pay for smelting. This has been the case at the famous Broken Hills mine, in Australia. After having for some time yielded over 12,000,000 ounces of silver a year, much of its mineral became so associated with zinc and other sulphides that it could not be smelted at a profit. At greater depth the ores of the "A. Y. and Minnie" mine at Leadville, Col., showed the same refractory character as those of Broken Hills. Three years ago it was one of the most productive silver properties in the country, yet before the crisis of 1893, it had been abandoned on account of the zinc and other sulphides with which the ores had become associated at depth.

The smelting even of good ores is becoming more and more costly, and the advance in cost appears certain to continue. This is an important point, which not only ordinary people but even practiced metallurgists might easily overlook through ignorance of the peculiar conditions developing in our mines.

For the smelting of silver ores, iron, lime, lead and silica must be present, in definite proportions, in order to produce the liquid slag necessary to the separation

of the metals from the non-metallic minerals. It matters not how rich an ore may be in silver together with one or two of the slag-forming constituents named, it cannot be smelted unless the others are supplied.

Silver ores from one mine or group of mines extremely rarely, and never for any considerable period, contain all the necessary smelting constituents in proper proportion. Some ores have lead enough but no lime, or too much; others have lead and lime enough but no iron, or an excess of silica; and so on. It is for these metallurgical reasons that smelting works are most advantageously located at railway centres, to which ores of the varied chemical character necessary to economical smelting "mixtures" may be drawn. The West is full of monuments to the folly of attempts at local smelting, in the shape of abandoned plants, that owe failure to the expensive reduction of ores far from "self-smelting," for which they have had to transport, handle and smelt barren fluxes. In this connection it is again apparent how important a part transportation charges play in the cost of silver.

The smelting element most commonly lacking now in silver ores—a lack already serious and rapidly increasing—is lead. There is plenty of lead in the country, but its weight adds immensely to its cost so soon as it has to be transported. It is in such demand that at any of the smelting works lead ores so poor in silver as otherwise to be useless find ready sale on account of their lead, which they contain in surplus of that necessary to smelt them, and for the reason that they therefore furnish lead for other "dry" ores in the mixture.

Some writers fall into the error of calling silver a by-product of lead. In these particular ores the lead is more valuable than the silver, but it is valuable solely for the sake of silver after all, and would not be missed on its own account. Ores rich in lead are often "treated" without cost, or at much less than the usual cost, for the sake of the lead contained. The same is true, but more rarely, of lime and iron or silicious ores, according to the district.

In view of this growing scarcity of lead, other methods of smelting than that of the shaft-furnace are in use, such as the modified Swansea cupola process used at Argo, Colorado, in the Boston and Colorado works. In this process the smelting of silver ores is accomplished without the presence of lead, but I cannot learn that this method of treatment is any cheaper than the old, except for certain "dry" silicious ores, or that it promises to become any cheaper than it now is. "Improvements in processes of (silver) extraction will of course be made, but so large a proportion of the cost of extracting silver now consists in the expense of mining and handling the ore, bullion and waste products, that no probable improvement in metallurgical processes will greatly diminish the cost of products." Such is the able opinion of Geo. F. Becker, United States Geologist, in *United States Consular Report No.* 87, December, 1887, referred to more fully below.

There are causes not connected with the scarcity of lead or with the increasing refractoriness of ores which are certain to increase the cost of smelting in the future. Like silver mining at all the poorer mines, silver smelt-

ing, too, has for years been carried on at a loss. This is the universal testimony of the smelters, and I believe it to be true. At Leadville not a smelter has paid a dividend for the last six years (1893). At this point one of the largest works is to be closed permanently. In the hope of establishing a profitable industry its owners have been obtaining Eastern capital wherewith to extend plant and business, smelting at a cost so low as greatly to embarrass their neighbors. These works are now idle and their creditors refuse further aid. A portion of one of the Pueblo smelting plants which was burned July 5, 1893, will not be rebuilt. This establishment, too, thanks to Boston capital, did business below cost, to the embarrassment of competitors who could not borrow so easily. This loose business must now cease, if for no other reason than that the banks and capitalists will no longer furnish funds to be squandered.

When the Leadville mines were first opened it cost $20 and upwards to smelt silver ores of a character which now, on account of their desirability as fluxes, are treated for nothing. At Aspen, at the outset, it cost, for transportation and treatment, from $35 to $40 per ton of ore, where the price has lately been $8 to $12 a ton for similar ore. A considerable proportion of this cheapening is accounted for in the too low charge for smelting. To make this process (shaft furnace) profitable smelters will have to charge an average smelting rate of not less than $10 per ton. The very best equipped works can, of course, make something at less than this. The Omaha & Grant Smelter, at Denver, with its stack 350 feet high and

three miles of immense flues, is arranging to precipitate and save each year the $300,000 worth of silver believed to have been "going up in smoke." This company has works at Omaha also. At Denver they smelt only. At Omaha their main work is refining gold and silver, a very different process. In 1893 they refined about one-third of all the silver refined in the United States. But these best works cannot do all the smelting. Poorer ones must be employed, so that the marginal cost of smelting, which will, of course, fix the figure for smelting in the cost of silver to the public, will for a long time not fall much below $10 per ton of ore. Should the less perfectly equipped smelters ever be crowded out of the business, it would be by a monopoly, which would in all probability put the price higher yet. However looked at, the important element of smelting charge in the cost of silver is certain to increase rather than decrease.

Another large item in the cost of silver, one which a "tenderfoot" would be quite sure to overlook, is the cost of timber indispensable for keeping open shafts and drifts as the work of mining proceeds. Fully half the length of workings in every instance, and often a greater proportion, has to be timbered, and where phorphyry is encountered, which swells so soon as opened to the air, timbers need to be at least twelve inches square. The Mollie Gibson, at Aspen, a relatively new mine, contains over three miles of subterranean drifts, shafts and levels, for the support of which timber in vast quantities is required. The Aspen mine, also at Aspen, maintains continually a stock of timber of $15,000 in value.

If there can be any question as to an advance in future in any factor of silver cost mentioned hitherto, none is possible here. The whole country in the vicinity of the mines has been stripped bare of trees. Looking in every direction from Leadville one sees hardly a tree six inches in diameter. All sorts of devices are in use for getting lumber down the mountains and sawmills up. To most of the mines timbers can of course be brought by rail, and this is already done on a large scale; but the freight bill is heavy and must increase with the increasing length of haul.

For several years hardly a silver mine in the country, rich or poor, has been operated in a healthy manner. Mines have been "skinned," as it is called, worked for all they could be made to yield for the month or year, instead of being "developed," as would have been done but for the fear that silver might fall. This has enormously and very abnormally swollen the product. I venture to say that half or more of the mines recently in work have thus been made to yield more per year than they can by any possibility ever yield again. Such squeezing has been resorted to not alone in anticipation of a fall, but also, very largely, to "bull" mining stocks. Under such pressure not only has the real production of mines often been prodigious, but the reputed production, whether gross or per ton of ore, has been fabulous in the extreme. It is remarkable that the Eastern public, familiar with such devices, should not have seen through these reports. Apparently it has not. Every story of investment agents or journals touching the richness of silver ores or the output of mines, however obviously intended to entrap

the unwary, has been taken as hard fact. Our chief dailies sedulously publish such reports, often with editorial comments, thus doing not a little to enhance their baneful influence.

Among the very mines overwrought in this way many have been kept open at a loss, the proprietors having toiled on, hoping to make their loss a little less than total. Such efforts, now hopeless, have ceased; while many mines, closed but not yet dead, will, when started, be operated less profitably than heretofore.

To shut down work means much more to a mine than to a factory. So simple a matter is it for a manufacturing corporation to resume work, that in slack times the opportunity to close down is often hailed as a positive blessing. Not so with a mine. If a "wet" property it must be incessantly pumped, day and night, at great cost, or permitted to fill with water, involving a cost vastly greater still when work is resumed. In any case machinery deteriorates, timbers rot, workings cave in, shafts squeeze out of line, and the neighboring "honest miner" generally packs off such property as may be portable.

The power used in mining cannot but advance in cost. I am told that the manufacturers have been furnishing nitro-glycerine powders at less than cost to help prevent the closure of the mines, dreaded as certain to deprive them of an extensive market. This will no longer be done. Power for drilling will be dearer rather than cheaper. Compressed air is the chief agent employed for this work, and the cost of it increases with the depth attained in the mine. There is at present no prospect that electricity will cheapen this item.

No practical electric drill has yet been invented. There is an electric pump which proves very successful for lifting water from stations, but electricity does not as yet bid fair to rival steam in portable sinking pumps, which must be employed in sinking shafts. However, it does not pay to use electricity even for lifting. It would be unprofitable to introduce electricity for any mining process unless it were available for all, for it is evident that the maintenance of different kinds of power (steam, compressed air and electricity) for hoisting, drilling and pumping would be entirely impracticable.

Were gold likely to be produced in ample quantities, a very moderate yearly output of silver might seem inordinate; but this is far from being the prospect. The world's annual output of gold, already too slight to meet the multiplied demands upon it, may be materially reduced should the silver mines remain inactive, and such result would be certain but for the new openings in South Africa. It has been thought that one-third of the gold product of the United States comes from silver mines and must be lost if they close. This is probably an over-estimate for the entire country though not far out of the way hitherto for the Rocky Mountain area. Thirty-three per cent. of the gold produced in our country has lately come from California alone. The Chinese are working some of the old placers in this state, and hydraulic mining tends to be more prosperous under recent legislation.

As appears from the following table, made up from an analysis of the ores handled by the Omaha & Grant works at Denver, coming from quite various localities,

very few prominent Colorado mines give forth gold only or chiefly.

AVERAGE CONTENTS OF COLORADO ORES.

Name of mine.	Ozs. Gold.	Ozs. Silver.	Per ct. Lead.
Boulder	4.22	22.3	.5
Clear Creek	.86	70.6	13.2
Chaffee	.58	11.3	11.5
Conejos	4.03	196.1	....
Dolores	1.16	116.3	6.4
Eagle	.78	30.0	.14
El Paso	5.29	21.2	....
Gilpin	1.10	7.0	2.3
Gunnison	.17	66.2	21.2
Hinsdale	1.20	88.3	9.9
Lake	.11	42.8	1.9
Montezuma	2.69	54.1	11.2
Ouray	1.35	81.2	9.5
Park	.83	11.2	2.3
Pitkin	.001	152.4	4.2
San Miguel	3.11	60.6	1.5
Summit	.30	19.2	17.5
San Juan	7.61	147.8	7.1

It requires both the gold and the silver contained in the ores to make an ore of a profitable grade. Both the precious metals are usually needed at full value, and the lead and copper besides. As ores must pay penalties in increased smelting charges for all undesirable ingredients like zinc, sulphur, and silica in excess of iron, the income from mining is often excessively small even when conditions are at their best. It seems safe to say that Colorado can permanently be

counted upon for hardly more than half of her usual gold output if silver mining continues dull as now.

To be sure, many miners hitherto engaged in extracting silver are for the moment turning their attention to gold. They have already produced goodly sums, rendering the Colorado output for 1893 a phenomenon. But I am assured that this denotes distress rather than prosperity. People are overhauling old placers and raising and shipping ores because they must do this to live. Men toil long before abandoning properties into which they have put their all. The fact is that most of the placers are worked out. The hydraulic mining of gold will long be fairly profitable, but the results even of this, so far as concerns the United States, will never be extraordinary.

Much has been loosely said about silver as a by-product. As just seen, gold is not infrequently a by-product of silver, but silver hardly ever, if ever, a by-product of gold. There is a mine in Summit County, Col., so rich in both gold and silver that it would probably pay to work it for either if it produced none of the other. One day in July, 1893, this mine sent to the smelter 53,130 pounds of "concentrates"—viz.: concentrated ore, each ton containing 18.2 ounces of silver, and $\frac{48}{100}$ ounces, nearly $10 worth, of gold, this proportion being not far from the usual one in the ore from this mine. At present this would be called a silver mine with gold as a by-product, but the gold price of silver may so fall that it will be thought of as a gold mine with silver for a by-product. This comes nearer than any other known to the writer to being a case of silver as a by-product of gold. I

ignore as too insignificant to take into account the trifle of silver alloy often found in native gold.

Among the copper mines the Anaconda alone yields any silver of consequence. Its main profit is from copper, and it will remain in work whatever occurs to silver. There are, however, several mines near Durango, Col., with ores of copper and silver, which were obliged to close owing to the fall in silver, so important a part of their "pay" was the silver contained.

Nor is any of our silver a by-product of lead, as has been so often alleged. There is not a mine in the United States where silver and lead are taken out together which could be worked for the sake of the lead alone. If their silver will not pay them such mines are of no value whatever. Instead of silver being ancillary in any way to the production of lead, the relation, so far as our own country is concerned, is precisely the reverse, lead being almost entirely dependent on the working of silver mines. At this writing, September 29, 1893, certain high-grade silver mines are opening again, induced partly by the high price, $10 and $12 per ton, attained by lead. The total lead product of the United States in 1892 was 222,000 tons, of which 178,000 tons were extracted incidentally to the mining of silver; and if the silver mines remain closed, our demand for lead cannot be supplied at home, save at a cost which will render it more profitable to import the metal, heavy as it is, from South America and Spain.

Of course, the question whether a further great output of silver is in store does not turn upon silver pros-

pects in the United States alone, because Mexico and South America have mines destined to be very productive. But there is no prospect that they can under any circumstances much increase their quota at any proximate time, and it is as good as certain that they cannot do this in the next ten or fifteen years. The great output of Mexico for the last few years is explained in considerable part by the same causes as our own, and, like our own, cannot continue. The Mexicans still mine and smelt by antique methods, and have little of the energy or the capital necessary to improve them. The difficulty of exchange between Mexico and the richer nations, induced by the demonetization of silver, renders it nearly impossible for her to borrow, and is at the same time turning Mexican industry away from silver mining into many new channels. In respect to silver production Mexico still stands nearly where we stood a quarter century ago, with the important difference that she has no means of securing the unlimited capital which has been so readily, even recklessly, loaned to our West for the development of mines and of approaches to them.

The following note, giving a *résumé* of the critical views of prominent geologists and metallurgists in the United States as set forth in the *United States Consular Report No.* 87, December, 1887, has much weight in connection with this part of our discussion.

N. S. Shaler thinks that the output of both gold and silver must henceforth gradually decrease, and that 'gold is more likely to become an article of increased cost within the coming half century than any other metal,' though we are 'liable to many sudden increments in the production thereof.'

J. D. Hague is of the opinion that while gold may slightly

increase in yearly supply, silver can hardly fail to go the other way.

R. H. Richards concludes almost exactly with Shaler.

J. S. Newberry utters, as the result of his long experience, the conviction that our production of both gold and silver has passed its maximum, and that in future we cannot expect a yield of more than perhaps one-half the greatest annual product of gold. Not only America's but 'the world's stock of gold will gradually decline from the diminished supply, the increased consumption in the arts, the abrasion of coin, etc.' The outlook, he thinks, is much the same for silver.

G. F. Becker expresses the view, which interestingly complements the above, that the relation in amount, by weight, between the gold product and that of silver is likely not to vary much in the future from the figures (29.1 of silver to 1 of gold) at which it stood from 1493 to 1875; that is, we are as likely to find new abundance of gold as of silver.

R. Pumpelly alone anticipates a considerable increase in the precious metals, more in gold than in silver.

Not one of the authorities who speaks in the report fears anything like a 'deluge' of silver, though R. W. Raymond believes the silver product likely to increase.

In addition to the above I would draw attention to the opinion expressed by R. H. Inglis Palgrave, in his memorandum, printed as Appendix B to the Final Report of the (1886) British Commission on the Depression of Trade and Industry, that even now, in spite of its wide demonetization, the employment of silver for coinage purposes appears to exceed the net production.

It will be seen that the above opinions concur remarkably with those of Suess in his well-known works, *Die Zukunft des Goldes* and *The Future of Silver*.

The above has a close bearing upon a proposed solution of the silver question to which many are now turning. I mean free coinage at some ratio lower than 16 : 1. Despairing of international action for free coinage at 16 : 1, and thinking free coinage by us alone at that ratio unsafe, not a few are considering the advisa-

bility of United States free coinage at, say, 18:1 or 20:1. Upon the general, many-sided and difficult question whether such a course would be wise, I do not here enter, though I myself should strongly disapprove it save as absolutely a last resort. But that a ratio of 20:1 would be safe in the sense that it would not result in the expulsion of our gold, I believe to be certain.

The ratio of 20:1 values silver at $1.03 (exactly $1.032) an ounce, a trifle under its average price for the year, 1890 (exactly $1.04633 per ounce). For the years 1891 and 1892, about twenty-four and a half times as many kilograms of silver as of gold were taken from the world's mines, and for 1893 only 20.25131 as many, the silver product having fallen off and that of gold increased. Now, if the receipt of over $1.03 per ounce for silver, with the promise of much more held out by the early operation of the Sherman law, and not relinquished until lately, has, under the exceptionally favorable conditions of thsoe years, called from the earth at most only twenty-four and a half times as many grains of silver as have been produced of gold, such a price, understood to be permanent and so without hope of increase, would, amid the vastly less favorable circumstances now existing and destined to exist, bring to light much less than twenty-four and a half times the weight of silver which will be produced of gold, probably not over twenty times. I conclude that at the ratio 20:1 the production of silver could not be expected to surpass that of gold. In fact, it would, I believe, be much more likely to fall below this, sending silver to a premium as before 1873.

VII.

THE MONETARY CONFERENCE OF 1892.

A COMMITTEE of commerce representing the North German states met in December, 1869, whose report urged upon North Germany a unitary system of money with a gold standard. In the following summer, just before war with France broke out, delegates from those states held at Berlin a convention in aid of the reform. Sore as was the need of this, no beginning could be made while war was on. Hardly, however, had peace come and the empire been set up, when the imperial law of December 4, 1871, ordained the monetary *régime* now in force in Germany, which the law of July 9, 1873, completed. By these acts Germany put away her ridiculous old monetary chaos based on silver and established a system built upon gold.[1]

In 1872, in order to stock up with gold, Germany began to sell her silver, whereupon the gold price of this latter metal commenced that career of decline which has continued ever since, and threatens to go still further. In 1872 and 1873 Denmark, Sweden and

[1] The unit of this is the Mark, containing 5.5311 grains of pure gold, or 6.1457 of standard gold, nine-tenths fine.

Norway entered into a monetary union having a coinage system founded upon gold.[1] Holland went over to gold monometallism by a law of June 6, 1875. The United States began paying gold January 1, 1879, as did Italy early in 1883. By the beginning of 1883, no less than a billion dollars in gold, equal to the product of the world's gold mines for ten years, had been called for by the countries named.

On December 18, 1873, fearing a disastrous influx of the metal from Germany, Belgium suspended the free coinage of silver, the other states of the Latin Union following on January 31, 1874. Holland, too, this same year, gave up coining silver for private account. On December 21, 1876, Belgium wholly ceased striking standard silver coins. Russia took the same course also in 1876; France and Switzerland in 1877; Italy a little later.

Nearly at the same time with these changes, demonetizing silver and requiring new gold, the flow of silver to the East decreased, and the yield of the American silver mines increased. Both phenomena tended to depress the value of silver and to lower its price in gold. Early in November, 1872, for the first time since 1852, silver sold in London under sixty pence per ounce. In 1871, silver prices for the year being averaged, 15.58 grains of silver would buy a grain of gold. In 1872 it took 15.63 grains of silver to do this; in 1873, 15.92; in 1874, 16.17; in 1875, 16.

[1] As their unit, they adopted the Krone, of such weight (*viz.* 6.226 grains) of fine gold, that a kilogram of this makes 124 twenty-Kronen pieces.

58; in 1876, 17.88; in 1878, 17.94; in 1879, 18.40. After 1879 the appreciation of gold in terms of silver was hardly sensible until 1885, when it required 19.41 grains of silver to buy one of gold. For 1889 the figure was 22.09.

This changed value-relation between the metals, unheard of before in modern times whatever the relative amounts of their production and consumption, led careful minds to the view that the demonetization of silver must have been the chief cause of the disturbance. In 1878, as a part of the Bland Act, Congress made provision for securing, if possible, an international conference upon the question. This was called, and assembled in Paris, August 10, 1878. Besides those from the United States, delegates were sent by England, Holland, Sweden, Norway, France, Belgium, Switzerland, Italy and Austria-Hungary. Léon Say was president. After seven sessions the conference dissolved on August 29, without "transactional" result. The German Empire did not participate. The British delegates, while strongly favoring the continuance of silver as full money elsewhere, declared that Great Britain would not give up gold monometallism. The representatives of Sweden, Belgium and Switzerland avowed the same disposition on behalf of their respective governments.

The principal effects of this conference were that public attention was called in an impressive way to the evils which seemed to have sprung from the demonetization of silver, and that Germany presently, in 1879, terminated her sales of silver, which have not been renewed.

In preparing for specie payments in 1878, the United States drew immense sums of gold from Europe, proving the advantage which America has in a fight with Europe for this metal. On account of our tariffs, Europe was unable to send us commodities for the entire volume of our exports, but had to pay for these in great part by gold. The European supply of this metal fell off considerably, and France was the worst sufferer.[1] Accordingly when, in 1881, preparations were making for a second conference, France joined the United States in inviting the other nations. The calls were issued in February. Germany now gave up her attitude of reserve and accepted the invitation. Eighteen states assembled to take part in this conference, which opened at Paris on the 19th of April, 1881. The sessions continued, with a brief recess in May, into the month of July, but the result was nearly as negative as before. Germany and England still declined to change their coinage systems, though delegates of both nations encouraged efforts to continue the monetary character of silver. Germany unreservedly favored its rehabilitation, regarded this as attainable, and was even willing to help it on, partly by postponing and partly by giving up altogether her sales of silver. Notice was given that under certain

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[1] In 1876 France imported 600,000,000 francs in gold; in 1880 but 194,000,000. Meantime its gold export grew from 90,000,000 francs to 413,000,000. In 1876 the vaults of the Bank of France held 1,539,000,000 francs gold, 640,000,000 francs silver; in 1880, 564,000,000 francs gold, 1,222,000,000 francs silver. The monetary woe of Europe was not lightened by Italy's preparations for specie payments, requiring 440,000,000 lire in gold.

conditions the Bank of England would considerably enlarge its holdings of silver. While unwilling to coin silver without the great states, Holland strongly voiced the conviction that international bimetallism was the only cure for the world's monetary ills. Italy was prepared, even without Germany and England, to join the rest of the Latin Union and the United States in re-opening mints to silver, if Germany would only abstain from selling silver and withdraw her smaller gold coins, and Great Britain would enlarge the legal-tender competence of her silver crowns.

After thirteen sessions the conference adjourned till April 12, 1882, to give governments an opportunity for reflection and negotiations. It did not re-convene.

After this adjournment no international body bearing an official character met for the study of monetary problems until last year, though a congress of private individuals went into the subject at Paris during the exposition there in 1889. Meantime incessant agitation went on, which, with the continued appreciation of gold, led in the summer of 1887 to the creation of a royal commission in England to investigate the relations of gold and silver. The work of this commission was very thorough. It gathered an enormous amount of testimony and examined a great number of experts, finishing its labors only in October, 1888. Its report embraces, first, a general part, conveying information, and signed by all the members; second, a more explicit portion, containing views of policy with reference to remedy. This latter part includes two sections, one favoring the maintenance of monometallism, the other being a plea for international bimetallism,

and these two sections bear an equal number of signatures.

The bimetallists merely recite, though in a very able way, the standard arguments for bimetallism; but the monometallists, Lord Herschell, Sir Charles W. Fremantle, Sir John Lubbock, T. H. Farrer, J. W. Birch and Leonard H. Courtney,[1] make admissions in virtue of which this report marks an epoch in the history of monetary theory. Arguing "as well *a priori* as from the experience of the last half century," they say:

> We think that in any conditions fairly to be contemplated in the future, so far as we can forecast them from the experience of the past, a stable ratio might be maintained if the nations we have alluded to were to accept and strictly adhere to bimetallism, at the suggested ratio. We think that if in all these countries gold and silver could be freely coined, and thus become exchangeable against commodities at the fixed ratio, the market value of silver as measured by gold would conform to that ratio, and not vary to any material extent.

Touching the fear that gold would disappear from a bimetallic league, they add:

> If the arrangement included all the principal commercial nations, we do not think there would be any serious danger of such a result.

These gentlemen had already joined the bimetallist commissioners in the following statement relating to the cause of the decline in silver measured by gold:

> Looking to the vast changes which occurred prior to 1873 in the relative production of the two metals without any corresponding

[1] Mr. Courtney has since become an ardent bimetallist.

disturbance in their market value, it appears difficult to us to resist the conclusion that some influence was then at work tending to steady the price of silver, and to keep the ratio which it bore to gold approximately stable.

These considerations seem to suggest the existence of some steadying influence in former periods, which has now been removed, and which has left the silver market subject to the free influence of causes, the full effect of which was previously kept in check.

Now, undoubtedly, the date which forms the dividing line between an epoch of approximate fixity in the relative value of gold and silver and one of marked instability, is the year when the bimetallic system which had previously been in force in the Latin Union ceased to be in full operation; and we are irresistibly led to the conclusion that the operation of that system, established as it was in countries the population and commerce of which were considerable, exerted a material influence upon the relative value of the two metals.

So long as that system was in force, we think that, notwithstanding the changes in the production and use of the precious metals, it kept the market price of silver approximately steady at the ratio fixed by law between them, namely, 15½ to 1.

Many confidently believed that the plentiful purchases of silver by the United States under the Sherman act of 1890, would raise the gold price of this metal to its old figure. For a time such a result seemed likely, but the hope proved illusory. After a remarkable elevation for a brief period in 1890, the price fell to a lower level than ever, leaving the United States in a precarious financial condition, having upon its hands a large amount of uncoined silver, paid for in paper which the country had avowed the purpose of redeeming in gold on demand.

This new collapse in the gold price of silver caused grave concern in Great Britain as well. Independently

of bimetallist agitation, considerations of a momentous character urged upon England all possible effort to prevent further divergence of the two metals. Enormous sums are payable by India to Great Britain in terms of silver rupees, for which, of course, the British recipients realize less and less gold in proportion as silver falls. Moreover, the Indian government has to pay to England each year some £15,000,000 *in terms of gold.* The actual payment is of course made in produce, of which fifty per cent. more is required than sufficed twenty-five years ago to liquidate the same amount of indebtedness—a great hardship to India. In addition to this, the lack of a fixed par of exchange between Calcutta and London had turned Great Britain's trade with India into a veritable game of hazard. Driven to it by the difficulty of commerce with England, India had built immense manufactories of its own, exporting their products in vast quantities to China and other silver-using countries. Rightly or wrongly, almost the entire depression of British trade was laid by very many to the dislocation of the old value-relation between the two money-metals.

Meantime a strong movement had been begun in Austria-Hungary for rationalizing the monetary system of that monarchy. Surrounded as it is by gold-using states, it could not do otherwise than choose gold for the basis of its new currency. It accordingly thus elected, and arranged for the purchase of great sums of gold. This, at a time when Russia, too, was amassing gold, and France and Germany were carefully husbanding their supplies, when Italy was finding it impossible to prevent a premium on gold, and when

the Bank of England itself had recently been forced to borrow three million pounds sterling of gold from France, made the monetary outlook gloomy as well for the Old World as for the New. A great many thoughtful men, not in the least inclined to be bimetallists, believed that gold was becoming too scarce to serve as the sole money of ultimate payment, and that consequently it would be of great advantage if a larger monetary use could be made of silver.

It was in the light of the events thus cursorily reviewed that the President of the United States, early in 1892, issued his invitations for a third international conference upon the silver question. Recognizing that some European countries not yet ready to adopt bimetallism might still be willing to confer touching plans more general than that, he couched his circular in such terms that all nations could consistently accept who might think the question of a larger monetary use of silver worthy of discussion at all.

The states of Europe, without a single exception, and also Mexico, accepted the invitation, making with the United States twenty in all, and at the first meeting of the conference every one of the fifty delegates was present. Mr. Beernaert, premier and finance minister of Belgium, opened the proceedings with an address. Mr. Montefiore Levi, a Belgian senator and one of the Belgian delegates in the conference, was chosen president. Mr. Edwin H. Terrell, United States minister at Brussels and a member of the United States delegation, was made vice-president, and Mr. Georges de Laveleye, editor of the *Moniteur des Interêts Matériels*, general secretary.

As it seemed to be thought that the United States delegates should provide an order of business for the conference, they presented at the second session, November 25th, a statement and program to which the conference adhered in all its subsequent deliberations. After rehearsing the considerations which had led to the convoking of the conference, this paper offered a resolution that, "in the opinion of this conference, it is desirable that some measures should be found for increasing the use of silver in the currency systems of the nations." The program stated frankly that the United States delegates believed bimetallism, if adopted by a number of nations, to be the best and the only satisfactory plan for the extended monetary use of silver; but expressed the wish that some of the governments, or their delegates, should offer plans short of bimetallism that might be expected to attain the desired end. In addition to any other such plans the United States delegates themselves suggested two, namely, that of Moritz Levy, proposed to the Monetary Conference in 1881, and that of the late distinguished A. Soetbeer, dated at Göttingen, August 5, 1892.

Debate was at once begun upon the initial thesis of the American program, that it is desirable to find some means of increasing the use of silver in the currency systems of the nations—a proposition which merely restated the terms of the invitation under which the conference had convened. The delegates of Germany, Austria-Hungary and Russia hastened to say that they were inhibited by their instructions from debating or voting upon any resolution whatever, while as to this

particular resolution Roumania, Portugal, Turkey and Greece, though without special instructions, felt compelled to similar reserve. Great Britain, Spain, Denmark, Mexico and Holland favored the proposition unequivocally. So, in effect, did France and the whole Latin Union, though with a certain hesitancy which led the English delegates to regard these delegations as at this time "disposed to criticism rather than to cordial co-operation with the object of the conference." One is not driven to this view of their conduct. They doubtless meant not to favor any scheme which involved further silver purchases by their states; but their later utterances proved that there was not a delegation of the Latin Union which did not regard a larger use of silver money as a good thing for the world, though two or three individual delegates may have doubted this.

Forssell (Sweden), Raffalovich (Russia) and Boissevain (Holland) deprecating an immediate vote, and the Americans not insisting on this, the resolution was tabled for the day, while, owing to subsequent matters more important than an expression of mere formal opinion, the consideration of it was not renewed. At almost any later date the resolution would have been adopted by a very large *per capita* majority of the conference, including the delegations of all the leading states. It is doubtful, in fact, if a single vote would have been cast against it.

In the course of this second meeting, Mr. Alfred de Rothschild, of the British delegation, presented a proposal looking to the purchase of silver by Europe, which received much attention both in the conference

and from the public. The substance of this as first offered was as follows: On condition that the American government should continue its purchases of silver,

> the different European powers should combine to make certain purchases, say to the extent of about five million pounds annually, such purchases to be continued over a period of five years, at a price not exceeding forty-three pence per ounce standard; but if silver should rise above that price, purchases for the time being to be immediately suspended.

Mr. Rothschild accompanied this motion with a paper in which, while insisting upon gold monometallism as the sole possible policy for England, he recognized "great grievances both in India and China in connection with the silver question," such that "if anything could be done towards diminishing those grievances, it would be extremely desirable." He raised the question whether it were "not possible to extend the use of silver generally and thereby stop a further fall, the disastrous consequences of which no one can foresee." He could "see no objection to silver being made a legal tender in Great Britain up to five pounds, instead of two pounds, as it is at present." In conclusion Mr. Rothschild declared:

> If this conference were to break up without arriving at any definite result, there would be a depreciation in the value of silver which it would be frightful to contemplate, and out of which a monetary panic would ensue the far-spreading effects of which it would be impossible to foretell.

The Rothschild proposal, with the schemes of Moritz Levy and Soetbeer, was before the conference at the beginning of the third meeting, and as the

American delegation had recommended, the discussion of these was declared the next thing in order, spite of Mr. Tirard's idea that bimetallism should be debated first. Much work needed to be done upon the three schemes named before they were fit to be taken up by the full conference. At this meeting, therefore, a special committee was created for the preliminary examination of these and similar suggestions. Messrs. Cannon (United States), Casasus (Mexico), Cramer-Frey (Switzerland), Foville (France), Osma (Spain), Forssell (Sweden), Fremantle (Great Britain), Molesworth (British India), Raffalovich (Russia), Saincte-lette (Belgium), Simonelli (Italy), Tietgen (Denmark), van den Berg (Netherlands), and the president and the secretary of the conference, composed this committee.

These gentlemen did much important work, and their two reports are most valuable. They directed their inquiries primarily to four points: (1) the possible restriction of silver production by taxation; (2) the future course of silver production; (3) the intention of the United States as to continuing the purchase of silver; and (4) the future monetary policy of British India. From the evidence adduced the committee saw no hope of limiting the world's silver output by legislative means. No testimony indicated that any deluge of silver was to be feared, the probability seeming to be in the opposite direction, to the effect that the maximum production had been nearly reached, even if not reached or passed already. Regarding the third question, the committee was informed that the United States Silver Purchase Act

of 1890 would almost certainly be repealed before very long, its repeal having been urged by both the great political parties. Touching India, Sir Guilford L. Molesworth declared that no change would be made in the monetary system of that country so long as there was any hope of international bimetallism. The adoption of the gold standard there, he said, would be fraught with sore difficulties; yet might have to be tried as a last resort.

The committee also carefully examined Mr. Rothschild's plan, he having expressed a willingness that before submitting it to the governments the conference should supplement it in any way thought proper. Members of the committee pointed out in it several grave defects. They urged that the silver bought ought certainly to be put to a monetary use. Mr. Cannon was quick to expose the unfairness of expecting the United States to purchase much more heavily than all Europe together and to buy at the market price, whereas Europe was never to pay more than forty-three pence an ounce. The Rothschild program came out of committee somewhat improved, yet still highly objectionable. It read:

1. The European states which might form an agreement on the basis of this proposal would buy each year thirty million ounces of silver, on condition that the United States should agree to continue its present purchases, and that unlimited free coinage be maintained in British India and Mexico.

2. The proportion of the purchase to be made by each country would be determined by agreement.

3. The purchases would be made at the discretion of, and in the manner preferred by, each government.

4. These amounts of silver would be devoted in each country to the monetary uses authorized by its laws; and the silver would be either coined or made the guarantee for an issue of ordinary or special notes, as each government might think fit.

5. The arrangement would be made for five years. The obligatory purchases of silver would be suspended, should the metal reach, in London, a price determined by agreement between the governments. The purchases could be resumed if the delegates of the different countries interested should agree upon the fixing of a new limit of price.. They would be resumed in any case if the price fell below the original limit.

The Soetbeer draft the committee considered very able, but too involved to be the basis of an international agreement. In accordance, however, with the Moritz Levy idea, they suggested (1) the withdrawal from circulation within a determined period of gold coins containing a weight of less than 5.806 grammes of fine gold (twenty-franc pieces); and (2) the withdrawal of notes of a less value than the coin of twenty francs, an exception being made of notes representing deposits of silver.

Not having been charged to recommend the adoption of any plan, the committee reported back the results of its work, to be passed upon in full conference. A decided majority of the committee favored the Levy recommendations, though not regarding them as of great importance; but the British delegate in the committee, Sir Charles W. Fremantle, said that to carry them out would cause Great Britain considerable inconvenience, and that therefore he and his colleagues could not favor such a course unless it were to be joined with some policy like that of Mr. Rothschild, by which other countries could assist in supporting the

gold price of silver.[1] To obviate this objection several members of the committee favored some modification of the Rothschild notion, but the representatives of the Latin Union on the committee, evidently determined that their governments should purchase no more silver, would not agree to this. On the contrary they went so far as to offer a formal motion, that even if such a plan were adopted by the conference, they could not recommend it at home. This motion passed the committee by seven votes against six, Forssell (Sweden), Raffalovich (Russia) and Tietgen (Denmark) joining the four representatives of the Latin Union to support it, while all the other members of the committee opposed.

Such were the questions brought before the conference in the first report of this committee. The report formed the subject of debate at the fourth session, and,

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[1] In order exactly to describe what has occurred, this article everywhere speaks of a "fall in the gold price of silver," or "in silver as measured by gold." Silver may, indeed, be said to have "depreciated," *i.e.*, its "*pretium*" has, in gold-using lands, gone down. But "depreciation" is a highly ambiguous term and should not be applied to silver, as nearly all who use or read it when so applied, giving it its more usual signification, take it to mean that silver has lost in *value* or *purchasing power*, which is false. Since 1873 silver has quite remarkably maintained its *value*, but, in common with commodities in general, has become less able, per grain, to *command gold*, that is, it has fallen in gold price. "General fall in gold prices" is of course but another name for "appreciation of gold." Laughable are the efforts of many, witness even Mr. Gladstone in Parliament on the 28th of February, 1893, to show that gold has since 1873 had a more stable value than silver. Gold they measure by itself, and silver they measure by gold, not seeing that to give their statement any meaning, they need a criterion of steadiness different from either metal, *viz.*, the prices of commodities in general.

as was natural, chief attention was devoted to the part of it presenting in its new form the Rothschild scheme. This part of the discussion took an unfortunate turn. Delegates seemed to think that inasmuch as the committee had modified the scheme considerably, no further changes in it could be effected. Consequently, instead of making an effort to remedy still further its defects, which in the judgment of the writer would have been entirely feasible, nearly all who spoke animadverted upon it so severely that Mr. Rothschild felt its fate to be sealed. He, therefore, at the beginning of the fifth session, withdrew it, whereupon discussion began upon the United States proposal of bimetallism.

This discussion was most interesting and was participated in by nearly all the distinguished members of the conference. Foremost in it were Senator Jones, Sir William H. Houldsworth, Sir Guilford L. Molesworth, Boissevain and van den Berg of Holland, Allard and Weber of Belgium, Forssell of Sweden and Tirard of France. What was said threw much light upon the opinions held in various countries on important monetary questions. The matured views of bimetallists were elicited, and a strong attack was made from the monometallist camp to drive their theory to the wall. The chief addresses on the gold side were those of Weber and Forssell. Mr. Weber said nothing new, but presented in a very able manner the line of argument concerning the increase in the world's wealth, the plentifulness of gold in the great banks, the fall of prices as a consequence of cheapened production, and so on, made familiar in this country by

the writings of Professor Laughlin and Mr. David A. Wells.

Mr. Forssell went into the subject much more deeply, revealing extraordinary originality and learning. His argument, however, seemed to the writer more cunning than conclusive. His course of thought was meant to show the novelty and untried character of precisely the project advocated as international bimetallism. He insisted that much danger of treachery must inhere in a compact made for such a purpose, —a fact which of course would be fatal. But everything that was of weight in this speaker's argument turned upon his main contention, that however large any international gold and silver basin might be, its gold might either leak out of it or be lost in it. He did not indicate in the least how gold could possibly leave the basin; but what he said of its conceivable disappearance inside the basin,—as to the possibility, that is, of a serious dearth of gold occurring within the compass of a bimetallic league,—is certainly well worth the attention of bimetallists. The thought was first advanced by Professor Lexis. It is not proposed to canvass it in this place. Suffice it to say that a contingency of the kind, if possible at all, could only arise in case of such an unexpected scarcity of gold as must put gold monometallism absolutely out of the question save for one or two nations at most. Therefore, even supposing Professor Lexis and Mr. Forssell correct in their view, an effort at international bimetallism is more rather than less advisable, though the ratio might need to be 20 or 25 to 1 instead of 15½ to 1.

The bimetallist arguments were far more numerous and diverse. Only a suggestion of their scope can be given here.

1. Bimetallism was alleged to be in perfect scientific accord with the law of supply and demand, instead of traversing this law, as it is charged by monometallists with doing. It was maintained: You of course cannot fix a value-relation between two wares, say gold and silver, independently of supply and demand as realized between them and between each of them and commodities in general. But between gold and silver, at any rate, a league of strong nations *can fix the relation of supply and demand itself.* Vastly the larger part of all gold and of all silver which has not been made into merchandise exists in the form of money. Now, of the gold and silver in the form of money the great governments acting together would have a monopoly. Their fiat touching the legal equivalence between given mint-units of the two metals would regulate the actual rates at which those units would exchange with each other. By the well-known law of prices when articles are affected by monopoly, the unwrought gold and the unwrought silver not existing as money would follow in value the monetized part.

2. No monometallist in the conference denied that prices have fallen (gold appreciated) since 1873, but several, recognizing the phenomenon, sought to account for it in the usual monometallist manner as the result of copious wealth production. In reply the figures of Jevons, Sauerbeck, Soetbeer and others were cited, which seem to prove that whereas from 1850 to 1870 the world's production of wealth increased on an aver-

age 2.75 per cent annually, the average gain between 1870 and 1885 was but 1.6 per cent. It was also set forth that the intrinsic costs of things were falling before 1873 as rapidly as after that date, though in the earlier period prices were rising and extraordinary prosperity prevailed. As still further proof that the fall of prices since 1873 has not proceeded merely from cheapening in intrinsic costs, the conference was reminded that falling costs imply prosperity, high interest and dividends, good wages and profits, few strikes and lock-outs, rapidly multiplying industrial undertakings and rapidly increasing wealth, none of which features fairly characterize the world's economic life since 1873. The vast injustice which the fall of prices causes in the payment of debts and the fulfillment of contracts was dwelt upon somewhat,—less, doubtless, than would have been the case had it been seriously questioned by any.

3. To the proposition that the world's supply of gold is still ample, which had been assumed rather than asserted, several forms of reply were used. The figures and critical estimates of Soetbeer and Leech were adduced, indicating that nearly all the gold now acquired from year to year goes into hoards or manufactures, or is shipped to the East, while population and business are everywhere increasing. Soetbeer, not a bimetallist, was further quoted as having demonstrated in his last work that the abundance of gold in banks does not prove an increase in the general stock of monetary gold. It was argued that a general paucity of gold would, by leading to its appreciation, inevitably operate to glut the financial centres, tend-

ing to make the holding of money more profitable than investment in productive industry.

4. Several times in the course of the debate attention was drawn to the fact that monometallists no longer urge, as many did fifteen years ago, that silver be demonetized everywhere. This was hailed as a silent recognition of paucity in the yellow metal available for money. Yet Mr. van den Berg, in many respects the ablest monetary authority in the conference, powerfully urged that gold monometallism is tenable only in that primitive form. You cannot, he said, permanently maintain gold monometallism anywhere unless you can do it everywhere. The world of commerce will not brook division into monetary hemispheres. It will not tolerate the chaos of one basal money for the West and another for the East, one for advanced commercial nations and the other for cruder communities, one for the mother land, the other for colonies. In returning to hard money, Austria must choose a gold basis in order to trade with her neighbors. So Roumania. But the motive works elsewhere as well as in Europe. Failing bimetallism, the merchants of English and Dutch India and of Mexico will clamor for gold as basal money for those lands and will get it if they can. The conflict for gold, if it is not paired with silver, must be not only irrepressible, but more and more bitter without end.

5. It was denied that any over-production of silver has occurred. From 1800 to 1820 silver formed three-fourths of the world's precious metal output, gold one-fourth. From 1850 to 1870 the relation of the two metals was exactly reversed, the output of gold having

sprung from an annual average of 55,000 kilogs between 1841 and 1850 to one of about 200,000 kilogs between 1850 and 1870. Michel Chevalier and Cobden then fancied the production of gold excessive, and Chevalier wished to demonetize this metal. All now agree that they were in error; for even after 1850 gold was at no time so abundant that a grain of it would not bring 15½ grains of silver in France. There were brief periods when it came a trifle short of doing this in London, owing to the state of Paris exchange. In 1892, 197,000 kilogs of gold were produced in the world, six times the annual average for the years from 1831 to 1850. The silver yield for 1892 was 4,480,000 kilogs, less than six times the annual average between 1831 and 1850. If the world's yield of gold suddenly increased some 300 per cent. and maintained the gain for twenty years without any over-production, who can speak of over-production in silver on account of an increase, very gradual, from an annual average of 1,654,000 kilogs between 1866 and 1875, to one of 2,930,000 kilogs for the next seventeen years, or about seventy-seven per cent.? Notwithstanding demonetization, no large stocks of silver bullion even now exist save that of the United States government, which will in all probability never be put upon the market. The low gold price of the metal is fixed by the comparatively small quantities here and there which do remain unsold.

6. The allegation of certain speakers that bimetallism had strong affinities with protection invited the bimetallists to set forth their view of the relation between these doctrines. It was ascertained that many

of the strongest foes of bimetallism are protectionists, and many of its chief advocates free-traders. One speaker affirmed that the refusal of free coinage to silver in so many nations, annihilating all fixity in the par of exchange between the gold-using and the silver-using parts of the world, thus turning commerce between these into a mere game of chance, was doing more to restrict freedom of trade than all the tariffs in existence. The charge that bimetallism is artificial was met partly by the argument traced above, under "1," and partly by showing the necessity that the amount of metallic or fundamental money should increase somewhat in proportion to population and business. In connection with this the nature of credit was considered, the view of Jevons being insisted on, that credit cannot permanently supplant money, and can be safely expanded only as its hard-money basis expands. It was also remarked that, as a matter of fact, credit has not increased very much since 1873, the amount of cheques cleared at the London clearing-house having been the same in 1887 as in 1870, *viz.*, about £6,077,000,000. It was held that if gold is the more suitable money for large transactions, silver certificates share much of its advantage here, while for all smaller dealings, involving immense sums in all, silver is far preferable even in the wealthiest countries. In the light of these facts, the demonetization of the white metal was declared to be "much the most flagrant and disastrous rupture of natural law ever committed by the action of states, not excepting any legislation in the history of mercantilism."

The debate on bimetallism occupied most of sessions

six, seven, eight and nine. British delegates had from the outset asseverated that Great Britain would not adopt this system. Germany aud Austria-Hungary let it be inferred that they would not do so, at least without England. France explicitly declared this to be her attitude. It would hence have been useless to bring the question of bimetallism to a vote—a thing, in fact, which was at no time intended. Under the circumstances such a vote could have borne no relation to the weight of argument, and would have begotten more or less discord, needlessly hindering future work. And much of this remained. Except in committee, there had been no canvass of the Moritz Levy plan. It was strongly hinted that the Rothschild program was to be revived in a more pleasing form. Besides, the entire second report of the special committee, full of important matters, waited untouched for examination in plenary session.

This report dealt with six different suggestions for the relief of the monetary situation:

1. That of Mr. Tietgen, proposing a union of states for the free coinage of silver at a ratio to gold as near as possible to that of bullion in the market, the coins to be full legal tender and to circulate internationally, each state being bound to redeem its own in gold.

2. That of Sir Wm. H. Houldsworth, based upon a project prepared by Mr. Huskisson in 1826 for the consideration of the British government. This Houldsworth-Huskisson measure, presupposing bimetallism in one, two or three states, is intended to guarantee the success of this by aid of other states, rendered through some means short of bimetallism. These non-

bimetallic states receive silver bullion, issuing therefor certificates which name each the gold value of the silver at the date of deposit. The certificates circulate as legal tender in all transactions, and are redeemable each in the weight of silver for which it was issued. If silver has risen, the holder gains; if it has fallen, he loses.

3. That of Mr. Allard, being an international application of a recommendation made by Secretary Windom in his report for 1889, to issue treasury notes against deposits of silver at its market price when deposited, each payable on demand *at its original value*, in gold, silver coin or silver bullion. Here, the government instead of the certificate holder gains or loses from fluctuations in the gold price of silver.

4. That of Mr. de Foville, advocating international legislation for the recognition and encouragement of silver warrants issued by mints and great banks, these to be commercial rather than monetary in nature, and negotiable without legal-tender quality or guaranty by governments.

5. That of Mr. Forssell, signalizing as capable of wider application the form of compact already in vigor between the national banks of Sweden, Denmark and Norway. Each of these banks has an account with each of the others, a cheque being honored by the drawee bank even when the bank drawing it happens to have no cash on deposit with the drawee.

6. That of Messrs. Montefiore Levi and Sainctelette, proposing that mints and government banks receive "Siamese twin" deposits, each consisting in a given amount of gold and a given amount, say twenty

or twenty-five times as much in weight, of silver, issuing for each such twin deposit a certificate redeemable only in the very weight of gold and silver deposited. The proportion of the silver to the gold in a deposit may, if necessary, be changed from time to time by an international commission. The certificates form a quasi-money, likely to be very useful in settling international balances.

The report containing these projects and the committee's reflections upon them gave the conference plenty of unfinished business at the end of the ninth meeting. But it was now December 15, when all agreed that the conference must soon adjourn for the holidays. The recess might have ended, say, January 5, but there was a general conviction that a longer interval was desirable, to enable governments to consider the various measures placed before the conference, so as to express more exactly their views and wishes. Therefore, at the tenth meeting, December 17, Baron di Renzis, of Italy, who, after Mr. Tirard's departure to become finance minister to the French government, was the leading delegate of the Latin Union, offered this resolution:

The International Monetary Conference, recognizing the great value of the arguments which have been developed in the reports presented and in the discussions at the meetings, and reserving its final judgment upon the subjects proposed for its examination, expresses its gratitude to the government of the United States for having furnished an opportunity for a fresh study of the present condition of silver.

The conference suspends its labors and decides, should the governments approve, to meet again the 30th of May, 1893. It expresses the hope that during the interval the careful study of the

documents submitted to the conference will have permitted the discovery of an equitable basis for an agreement which shall not infringe in any way the fundamental principles of the monetary policy of the different countries.

The motion was supported in a number of very strong speeches, and passed without a dissentient vote.

In conclusion a few observations are pertinent to the foregoing *résumé*.

1. Judging by the utterances, public and private, of their delegates, the European cabinets must consider the monetary condition of the Western World with considerable concern. As Sir Rivers Wilson, an uncompromising monometallist, chairman of the British delegation, remarked in the second session:

> There can be no question, in our opinion, that all the governments who have sent representatives to this conference, even those who have instructed their delegates to act with the greatest reserve, recognized the presence of a danger; otherwise there would be no justification for our presence here.[1]

2. The old serenity of monometallist faith is much discomposed. The apostasy of theorists like Schaeffle and Wagner and of practical students like Hucks Gibbs, Goschen and now Courtney, has had much effect. More influential still, in this way, have been the growing scarcity of gold relatively to the need of it, the incessant fall of prices, confined to the gold-using world but universal there, and the distress which inter-

[1] Most of the great European newspapers, influenced by those who are, or think they are, benefitted by the continued appreciation of gold, either misapprehend or misrepresent both the facts of the monetary situation and the views of responsible monetary officials touching these facts.

national commerce suffers from the disappearance of all fixity of par between the gold and the silver nations. If monometallism still has able champions, as it most certainly has, either governments for some reason sent few of them to this conference, or most of those sent preferred silence to speech.

3. Not a particle of doubt is possible that Germany, Austria-Hungary, Russia and France, with the whole Latin Union, and indeed all continental Europe, would resume the free mintage of silver if Great Britain would lead the way. As Baron di Renzis said in the address with which he accompanied his motion that the conference adjourn :

> From all sides in this assembly—and the fact is apparent in every speech which has been made, whether the speaker stated it openly or merely alluded to it—eyes are turned toward England. It is perceived and recognized that England has to fill a preponderent rôle upon this question. All the world is waiting to see that great country set the goodly example for which we hope. The speeches of many delegates have appeared almost like reproductions of an historic phrase. In this struggle for the rehabilitation of silver everybody in fact has seemed to be saying : "*Messieurs les Anglais, tirez-les premiers.*"

4. Will the British, thus invoked, "be the first to fire?" Will they fire at all? None can say. What is certain is that they ought to, and that a conviction to this effect is entertained more and more widely in England itself. This was shown by the vote in the Commons February 28th, 1893, on Sir H. Meysey-Thompson's motion that the house express itself in favor of reconvening the Brussels conference. Recent advices assure the writer that this motion would almost

certainly have passed had not the government unexpectedly taken the position that its adoption would be regarded as equivalent to a vote of lack of confidence, thus securing against it the suffrages of many who really favored it. As it was, the motion was lost by a majority of only 81 in a House of 381. On April 18, 1890, only three years before, a similar motion, encountering no adverse effort, was lost by a majority of 96 in a House of only 270.

5. Is it of any use for the conference to reconvene?

A twofold reply may be made to this. First, the silver imbroglio being so complicated and so serious, the nations cannot afford to dissolve the conference till every proposition now before it, as well as all new ones having aught of promise, have been fundamentally studied. For lack of time the conference has not yet really sounded a single one of them. Further, two at least of the drafts already submitted are at once so simple and so meritorious that the conference might quite possibly unite upon one of them. Mr. Allard's is in this case. Hazardous as the Windom plan would have been for the United States alone, a syndicate of strong nations could, in the writer's judgment, adopt it with entire safey, and through it, without loss to any one and with incalculable benefit to humanity, restore silver to its old price and function.

Were this plan rejected, that of Moritz Levy remains, which, modified a little, could hardly fail of being acceptable to all. Let the nations withdraw from circulation every gold coin weighing less than the twenty-franc piece, with every uncovered note worth less than twenty francs, and fill the gap thus opened with

new silver, to circulate either as coin or through certificates. Some such proposal has been long before the world and has been endorsed in many quarters. It might conceivably even lead to bimetallism; but should it not, it would still have numerous advantages. France herself could hardly object to it. Its execution—as would be the effect everywhere—would richly replenish her gold centres, bringing into them the bits of gold now scattered among the people and useless in emergency. Thus, while the measure would somewhat raise the silver proportion of the country's total metallic money, upon its central metallic stock—which is a more important consideration—it would have the reverse effect. And the plan would be well worth trying if France had to be excused from buying silver under it.

VIII.

GIFFEN ON BIMETALLISM.

MR. ROBERT GIFFEN'S book, "The Case Against Bimetallism," has probably had more influence than any other recent publication in hindering monetary reform. It is a work of ability in many ways. It betrays firm grasp upon several important monetary principles. It also conveys a great deal of useful information, which, in the main, is set forth with much clearness. The volume certainly has defects. Asperity shows itself on here and there a page, as if the author found it easier to scold opponents than to answer them. One notices in it, too, occasionally, what seems a lack of frankness, the author pretending to admit an antagonist's point, yet, after a little, quite ignoring it. Sometimes he goes beyond this, obscuring an issue where he is weak by what looks like an effort to throw dust in readers' eyes. Mr. Giffen is never too cordial in acknowledging the errors into which he has fallen, when others have pointed them out. And, as we shall see, he is far from being always logical. Spite of these faults, "The Case Against Bimetallism" well repays study.

Impressive and valuable are the numerous paragraphs

in this book, as well as in Mr. Giffen's other writings, which, so far as they go,. place him in complete accord with bimetallists and in complete disaccord with the representative monometallists of America. For instance, he declares without hesitation that since 1873 silver has not lost in value, while gold has seriously gained in value. He also accepts the movement of prices as a perfect proof of this steadiness of value in the one case and change of value in the other; and he admits that such appreciation of gold is very sad and unfortunate, being no mere phase of lowered costs, no sign of advancing welfare, but the reverse.

He says: "If we were told that copper or iron or wheat were rising because there was a deficiency of the supply of them to meet all the demands, we should accept the statement as a matter of course. But what is true of copper or iron or wheat, must equally be true of any commodity which happens to be the standard monetary substance. If gold or silver is that substance, and gold or silver is increasingly in demand without any corresponding increase in supply, then people who want gold or silver for any purpose must give more for them."

"We see, then, how widely mistaken those monometallists have been, who, in their dislike of bimetallism, have denied that the recent great demands for gold in proportion to its supply were likely to have caused a rise in its exchange value for other things. Looked at in this way, the fall of prices is itself a proof that gold, in relation to all the demands for it, has been relatively scarcer than it was. Everybody who has wanted it has had to give more for it. If everybody

who wanted coal or pig-iron was giving more for it than before, we should not hesitate to say that coal or pig-iron were relatively more in demand than they had been; and what we should say of coal and pig-iron we must also say of gold or silver in a like case."

"Some monometallists, as we have already hinted, in their eagerness to refute bimetallism, have given a great advantage to their opponents by denying altogether the necessary connection between a fall in general prices and a relative scarcity or short supply of gold, which they have foolishly done on the score of gold, in the form of currency, being abundant enough."

"To say that the quantity of money regulates prices is only the same thing as to say of any article that is bought or sold, that its quantity is a material factor in determining its value."

These extracts are from "The Case Against Bimetallism." The author has much on the same subjects, proving the unsteadiness of gold as a standard of value, in his admirable article on "Recent Changes in Prices," in the *Journal of the Royal Statistical Society*, for December, 1888, which unfortunately he did not transfer to the volume named. He here appeals to the tables and index numbers of Sauerbeck, Soetbeer, the *Economist*, and the *Board of Trade*, and shows incontrovertibly that instead of measuring the value of silver by gold, the only scientific procedure is to gauge both gold and silver value by general or average prices.

Doing this, he declares that "if we avoid extreme years, the average fall in commodities measured by gold rather exceeds the average fall in silver measured

by gold. In other words (he proceeds) instead of speaking of the depreciation of silver, we should be quite justified in speaking of the appreciation of silver when we measure it by the average of commodities.[1]

In this article Mr. Giffen figures the net import of gold into England from 1858 to 1871 as 67¾ millions sterling, an annual average of some five millions, and that of the following sixteen years, 1872–1887, as only 11½ millions in all; when, had the former rate of increase continued, instead of 11½ millions, the net import of the years 1872–1887 would have been nearly eighty millions.

Then he says: "It is clearly impossible to contend there has been no change in the movement of gold, comparing the one period with the other. The stock of gold in England available for money has not been added to of late years as it was in the period just before. The stock with the additions has had to do more work, and it has been able to do so only because prices have fallen, and incomes have not risen, whereas from 1850 to 1873, when gold was going so largely into England, not only did prices rise a little but incomes a great deal."

Considering this scarcity of gold as not likely soon to cease, Mr. Giffen said: "Then we may have a long continued fall of prices from generation to generation, and this will probably have very great effects as time goes on."

"The debtors pay more than they would otherwise pay, and the creditors receive more. The matter is

[1]This is probably not true since early in 1893. Silver seems now to have actually fallen in value a little.

thus not unimportant to the two large classes of the people who make up the community. Appreciation is a most serious matter to those who have debts to pay. It prevents them from gaining by the development of industry as they would otherwise gain."

There were in store, he said, "troublous times both for some of the Australian Colonies, and for a country like the Argentine Republic," even if the appreciation should not grow more serious than it had been. "That the pile of debts has to be paid, principal and interest, in appreciating money, is a most serious consideration." This appreciation, he assures us elsewhere, is not a phase of cheapening commodities. Were it so, the increased wealth would show itself in higher wages, rents and profits, and not in low prices.

Against the "continued pressure on gold" Mr. Giffen asserts that "the only compensation would be a more extended use of economizing expedients." He believes that "such expedients will in fact mitigate and modify the demand for gold, but the question is to what extent. And (he remarks) just as I believed in 1872, that they would not do so to the extent of preventing a fall of prices, should the supply of gold not increase, so I do not believe now that they will have a mitigating effect to any serious extent. The question thus becomes, What is to be the supply of gold?"

Mr. Giffen here recognizes in the most complete manner the general truth of the quantity-theory of money; and, since he has never, I believe, retracted the above statements, one is justified in using them to interpret such of his utterances as apparently imply a contrary view. Some such present themselves in his

chapter entitled "A Problem in Money." Yet even here the general doctrine is clear, recognizing an ultimate dependence of the value of the money unit on the mass of metal in the form of standard money, which is entirely sufficient to satisfy the bimetallist contention.

Mr. Giffen clearly indicates how we must answer the great question raised by him, What is to be the supply of gold? He says: "The demand for non-monetary purposes on the annual production is preponderant in the case of gold, and very large in the case of silver. About two-thirds of the gold annually produced is taken for the arts; and if the consumption of India is included, as being either for simple hoarding or for the arts, and in no case for the purpose of circulating money, then the demand for gold for non-monetary purposes appears almost equal to the entire annual production." This judgment is equally just and significant.

Mr. Giffen is inexcusably unfair in stating the views of bimetallists in respect to the quantity-theory and as to the exchangeability of gold and silver in monetary service. On neither of these points does the bimetallist theory essentially differ from views which he himself again and again propounds, He recognizes that, generally speaking, prices vary inversely as the volume of fundamental money. He is aware, indeed, that circumstances may temporarily perturb this relation, and that it hardly holds at all if currency which involves the fiat or the credit element is reckoned as money. In showing that what determines prices is standard money and not currency, Mr. Giffen has made to monetary science a genuine and valuable contribution. He is

quite justified in declaring that the quantity-theory cannot be truthfully stated in the crisp, absolute phraseology so common upon Ricardo's pages. But all careful bimetallist writers, like Arendt and Hucks Gibbs, recognize this as well as he, and the absurd quantity-theory which he criticises it is quite unfair to represent as part of the bimetallist creed.

Nor did any bimetallist, I am sure, ever characterize gold and silver as equally fit for "each and every" particular monetary service. The superiority of gold for some purposes is admitted by all. Precisely because gold is better for certain uses ought the nations to let silver take its place whenever and wherever this is possible, a result which cannot be compassed so long as silver is any where denied its old status as money of ultimate redemption. For instance, what piles of gold would be liberated were silver legally in condition to constitute bank reserves.

Mr. Giffen's statement of government's function in respect to money sounds very antique. "A government should authorize a coinage having the essentials described, arrange for the coins to be legal tender and receivable in taxes, and for the rest leave the matter alone." Even this legislation upon money he seems to think of as "meddling." Such *à priori* dogmatism has had its day. Instead of declaring beforehand precisely what governments may and may not do, political students nowadays say: Let the government undertake in any matter whatever it is clearly apparent that the government can do with advantage to the public. Moreover, thus to assume principles of governmental action which would forbid the rehabilitation of

silver, is not arguing but begging the question. "New occasions teach new duties" in finance as elsewhere. If it is best that silver be again made full money in those parts of the world where it is not so, then governments should be urged to proceed in that direction whatever the doctrinaire political philosophy of a past age may say.

Mr. Giffen adoringly reveres Locke as an authority in money. Why go back so far for light when the monetary problem in debate is essentially new? Locke was a wise man, but he could hardly be expected to elucidate monetary affairs so different from those of his time. However, if one will appeal to Locke, let him read all of Locke. Locke declares that but one metal can be standard money at a given time and place. He also declares gold unfit to be this. Supposing him with us now, he would be as certain to recall one of these dicta as the other. From his insistence upon the use of the two precious metals as money, all the probability is that, to-day, seeing international pacts of various sorts working successfully and to the enormous advantage of all, he would favor a league of nations for the free coinage of gold and silver at a common ratio. In the seventeenth century, mercantilism, national isolation, being at its height, it was possible to use gold and silver moneys together only by making one the standard and occasionally rating the other thereto. Happily a better scheme than this is now attainable; or, if it is not attainable, we need sounder evidence of this than the fact that Locke had not discovered a better.

Even upon those points where Mr. Giffen is most

antagonistic to bimetallist principles, he makes admissions fatal to his theory and decisively in favor of his opponents. He says it was of themselves, quite independently of the French mint regulation, that gold and silver continued almost at the parity of 15½ to 1 for the forty years before 1847. If this is true, bimetallism is certainly feasible. If, without the aid of any but haphazard legislation, through the unregulated play of supply and demand between the two metals, their relative value stood so nearly the same through so long a period, it must, to every unprejudiced thinker, seem unquestionable that the careful arrangement proposed by bimetallists, being entered into by four or five of the most powerful states, would for an indefinite time prevent the appearance of any premium at all on either metal. If, without any regulation, the parity of 15½ to 1 between the metals was so nearly realized, it could beyond doubt be realized completely by setting up the additional steadying influence of wise international regulation.[1] That such regulation could be applied, and with effect, Giffen himself most explicitly admits in discussing the monetary work of France after 1849. He frankly says that then gold was kept from becoming so cheap and silver from becoming so dear as they would have been if left to themselves, and that this extra steadiness in their values was due to the mediation of France.[2] It is clearly Mr. Giffen's belief in general, that, if an international monetary basin can be made so large that both gold and silver are always plentiful in it, the

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[1] Including an *ad valorem* mint charge. See *postea*, p. 173.

[2] He attempts to qualify this statement but does not essentially do so.

principle of bimetallism will work; the legal parity between the two metals asserts itself and continues. The necessary safeguard here prescribed scientific bimetallism will provide.

Touching the future also Mr. Giffen avows an expectation the logic of which wholly overthrows his denial that bimetallism is possible. He expects that when perverse legislation in the supposed interest of silver has been relinquished, silver will again, of itself, as after 1803, assume a well-defined and constant value-relation to gold. He advances this belief as some reply to the strong argument for bimetallism based on the present disordered exchanges between gold and silver countries. But, if it is reasonable to look forward to a time when the unregulated influence of supply and demand shall render the relative value of gold and silver as steady as it was between 1803 and 1847, wise men have only to be convinced of this to demand international bimetallism at once. In that case your monetary treaty has but trifling work to do at best. If it has any vigor at all, and Mr. Giffen himself admits that it might have, then it could annul such trifling departures from the attempted parity as he thinks appeared between 1820 and 1847, and render the two metals perfectly steadfast at the appointed ratio.

It is thus seen that the question whether between 1803 and 1847 the French mintage law had aught of influence in keeping the value of a gold grain so very nearly equal to that of 15.5 silver grains, has little more than an historical interest. With the answer to it bimetallists are less concerned than Mr. Giffen. Their

theory, their cause in no sense or degree depends upon it. If the French law in particular exerted no influence, that remarkable steadfastness of the two metals in relative value must be ascribed to the fortuitous bimetallism constituted by the nations, France included, each by and for itself coining gold or silver or both; and I repeat, though it is perfectly obvious, that if this was really the cause of such steadfastness, the nations now need only a common ratio for coinage, with recognition of both metals as full legal tender, in order to float the two together for a century without the slightest premium upon either. If the French law was not the force which then held gold and silver so close to their legal parity, something else did this; and that other source of stability, whatever it may have been, can be re-applied with improvements that shall render its working complete. To say that a ratio was all but perfectly kept for 70 years uninfluenced by any legislative effort directed to that end, yet deny that such or any ratio could be established even by the most systematic plan on the part of the great governments, is an astounding position.

But to monetary students the historical interest attaching to the French experiment is considerable. Did the French bimetallic system break down in those years, as Mr. Giffen alleges? I maintain that it did not.

It should be remembered that to affirm the incessant efficiency of the French system is not to lose sight of co-operative forces, such as the demand for silver in Germany and India and the demand for gold in Eng-

land, and, specially after 1834, in America.[1] What is asserted is that had these various forms of demand and supply been in operation without the additional influence of the French mintage custom, in virtue of which, in France, gold and silver alike were received and made into full money at the rate of 15½ to 1, the relative value of the two metals would have varied immensely more than it did. Their oscillations would then have been such as occurred during the seventeenth and eighteenth cenutries, and they might have been considerably greater than then occurred. Bimetallism does not ignore or supplant the ordinary forces of demand and supply; it simply directs and supplements these.

If the force of France's bimetallism was zero during the years in question; if, in other words, nothing but the unregulated influence of demand and supply was operating upon gold and silver values, it is thoroughly inexplicable how the two metals remained so nearly at the legal ratio. Granting that what Mr. Giffen calls the "premium" on gold in these years was really such, one cannot possibly understand on his hypothesis why that premium was so exceedingly slight instead of being 10, 20 or 50 times as great.

1. The steadiness cannot have been due to the conditions under which gold and silver were produced. During the years under survey the product-ratio between gold and silver varied immensely. Between 1800 and 1810, 50.3 times as many ounces of silver as

[1] Except in 1816 and 1817 much gold was coined in the United States every year before 1834, though the coinage greatly increased after the re-rating of gold to silver that year.

of gold were taken from the earth. Between 1810 and 1820 this product-ratio was 47.2. Between 1820 and 1830 it was 32.4, and between 1830 and 1840, 29.4.

2. True, the relation of total gold money supply to total silver money supply was fairly regular in these years, but Mr. Giffen cannot appeal to that fact, because it is still a fact. The total monetary supply of the metals relatively to one another has undergone no more modification since 1873 than before 1850. If this regularity in the total supply was what preserved the relative value so nearly unchanged before 1850, such effect ought to have continued until now. The alleged cause remaining, the alleged effect should have remained. But this has not been the case. The relation in value which for seventy years no vicissitude could change sufficiently to awaken the slightest notice thereof on the part of commerce, gave way at once so soon as there was doubt whether the Latin Union would continue to coin legal tender silver.

3. As little can Mr. Giffen gain by referring the almost perfect parity between gold and silver at 15.5 to 1 from 1803 to 1850, to the discordant bimetallism of the various nations. If France be omitted, bimetallism has been a much more disorderly thing during this century than it was in the eighteenth. Early this century silver production was most fitful, as was, later, the demand for the metal from India. How perturbing was the resumption of specie payments in England in 1821, and the degradation of its gold dollar by the United States in 1834 from $\frac{1}{15}$ the weight of the silver dollar to about $\frac{1}{16}$ of its weight. France herself twice changed her charge for coinage before 1850. That,

France aside, eighteenth century bimetallism was superior to nineteenth century bimetallism, Mr. Giffen himself declares.[1] Yet the relative values of gold and silver varied far more during the eighteenth century than betwene 1803 and 1850.[2]

Nor does one see how any possible combination of the phenomena just suggested could have wrought the effect for whose cause we are searching. It must be that the French law had influence between 1803 and 1847.

Recur again to the tremendous drop in the gold price of silver which occurred in and after 1874. Except the inoperativeness of the French mint arrangement, no ground for a change in the value-relation between the metals was at this time present; which was not at hand in very much greater force at some moment or other between 1803 and 1847. At no date since 1873 has the dissidence in the product-ratio of the metals begun to be so great as in those years. Never until 1881, after the deluge of gold from 1850 on, were 15½ times as many grains of silver as of gold produced in any year. No year since has the product-ratio reached 25 to 1. For 1893 it was only 20.25+ to 1.[3] The course of silver production as of gold production was vastly less regular from 1803 to 1873 than it has been since 1873. The interruption to silver mining by the Spanish American Revolution has had no parallel since. About 1832 the net yearly import of silver into India was nearly zero. It was thenceforward fairly regular at about $12,500,000 yearly

[1] *Case Against Bimetallism*, p. 20. [2] *Ibid*, p. 21.

[3] Figured from the Director of the Mint's estimate of production.

till 1846; but just at the time when most gold was pouring into Europe from Australia and California, an immense and unprecedented demand for silver for the far Orient arose, nothing like which has had place since. It is no wonder that the year 1860 saw no silver *écus* coined. What is remarkable is the proof offered by its standing this terrible strain, that even the then very imperfect system of bimetallism must have had vast power in steadying the relative value of the precious metals. By every rule of sound reasoning we are forced to conclude that it was the refusal of coinage to silver as full money after 1874 which caused the gold price of silver to fall, and, by parity of logic, that the presence before 1847 of the force which was absent after 1873 had a positive and determining effect.

Our author's error upon this point proceeds from his assumption that by 1820 France had lost all her gold. Were this true his reasoning would be more sound. A legally bimetallic country from which either metal has been entirely drained away, of course cannot permanently carry on its bimetallic *rôle*. After that it tends to affect the relative value of the metals as would a monometallic land using the cheaper. The change need not by any means be immediate, because the legal attitude of the country is equally friendly to both metals, and its power, through a fortunate condition of the exchanges, to use for distant payments the gold of a neighboring country, settling therefore with produce, might keep up the old *status quo* for a long time.

But France had not lost all her gold, though she had lost much. During every one of the years named,

that is, from 1803 to 1850, considerable sums of gold as well as of silyer were brought to the French mint, a fact which I prononnce inexplicable unless the principle of bimetallism was working. People could not have offered gold at the mint had there been no gold in France.

The declarations of Chevalier and of certain English travelers in France during this period, to the effect that French money was all silver, are too indefinite to settle the question. So a Californian upon a visit East might declare that there was no gold in New York City but only paper money, or an Eastern man temporarily in San Francisco really suppose bank notes to be unused in that city. And there are statements of a contrary tenor, like that of Huskisson, in 1826, a year in which little gold was coined in France. He said: "The bulk and basis [of the French currency] is silver, but there is a considerable proportion of gold. They both retain their places in circulation without interfering with each other."[1]

Nor can gold at this time have borne a premium, in the proper sense of the word, for, to hoard or to export, save for the personal use of travelers in lands where Napoleons were welcome, gold coins would have been no better than gold bullion, whereas men continually wished to turn gold bullion into coin and were glad to pay something in seigniorage for the privilege. They must have desired to use their gold as currency or as reserves.

For this incessant coinage of gold in France during that period, Mr. Giffen has no explanation save the

[1] H. H. Gibbs, *Colloquy on Currency*, pp. 46 47. See *supra*, Introduction, the statement of M. Léon Say.

alleged necessity which a few Frenchmen would be under of sending small values from place to place, which could be done most conveniently with gold coins. Even if this account of the phenomenon sufficed, the gold demand mentioned would be so far forth a proof that the bimetallist law was working, because, as already said, the bimetallist system presupposes and takes advantage of all forces whatever which set up a requirement for either of the two metals. But Mr. Giffen's explanation does not suffice. The demand for gold coins to which he appeals would have been nearly regular, increasing with the population; whereas the actual coinage of gold greatly varied from year to year, as now. It must have been required for other purposes.

If my thought is sound, if the French system did not collapse, if the two metals continued tied together, so to speak, by France's bimetallic regulation, how are we to explain the phenomenon which appeared regularly from 1820 to 1847, as well as earlier, denominated by Mr. Giffen a "premium" on gold in France? Careful definition on this point brings to light another source of error in Mr. Giffen's reasonings.

This so-called "premium" on gold in France between 1820 and 1850 was frequently over 1 per cent. In 1837 and again in 1847 it was $2\frac{1}{10}$ per cent. On several other occasions it was at or near 2 per cent. The average was perhaps about $\frac{4}{8}$ per cent. Of this the French mintage charge in these years, specific, not *ad valorem*, and always heavier for silver than for gold, is the main explanation. From 1803 to 1835 the tariff for coinage was 9 francs per kilogram of standard gold,

3 francs per kilogram of standard silver, making the "mint-ratio" between the two metals 15.69+ to 1 instead of 15:1, the legal ratio. That is, a kilogram of standard gold bullion would bring at the mint 3091 francs [3100—9]. To get the same sum by offering silver you had to give not 15½ kilograms but a little over 15.69 kilograms. From 1835 until 1850, 15.620 times as much silver (by weight) as of gold was required to obtain a given number of francs at the mint. From 1850 to 1854 this mint-ratio was 15.586 to 1. In 1854 it was made 15.583 to 1. The figure 15.69 exceeds 15.5 by nearly 1¼ per cent.; and 15.626 exceeds 15.5 by a little over $\frac{8}{10}$ per cent.; so that, unless gold were at a discount, we should expect the value of gold bullion to be above the ratio by about 1¼ per cent. to 1835 and by about $\frac{8}{10}$ per cent. after that date. The facts wonderfully accord with this.

The following table from the appendix of H. H. Gibbs's *Colloquy on Currency*, shows the highest and the lowest "premiums" on gold bullion at Paris for the years specified.

Year	Highest per mille	Lowest per mille	Year	Highest per mille	Lowest per mille
1821	12	5	1834	11	4½
1822	7	1	1835	13½	4
1823	12	3½	1836	16½	9
1824	9	1	1837	12	7½
1825	4½	par	1838	11	7
1826	10	1½	1839	10	7½
1827	5	1½	1840	10	3¾
1828	10	1¼	1841	10	3¾
1829	19	6	1842	12½	5½
1830	16	5	1843	14½	10
1831	10	2	1844	13½	8
1832	20	1	1845	18½	9
1833	21	9½	1846	18	10
			1847	21	7

Comparing, now, the figures of this table with the mint-ratio, 15.69 to 1835 and 15.626 after that, one observes that the lowest "premiums," $\frac{5}{10}$ per cent., $\frac{1}{10}$ per cent., $\frac{35}{100}$ per cent., etc., are just about as much under the mint-ratio as the highest "premiums" are above. It follows that if the highest are to be viewed as so many premiums on gold in the sense in which Giffen uses the term, the lowest are equally premiums on silver. If this were true, these figures would afford a beautiful proof of bimetallism, bullion value playing now just above and now a trifle below the legal ratio but incessantly forced back thereto. But these variations from the mint-parity are not to be thus interpreted.

We may, to be sure, apply the expression, "premium" in this case, and such appellation will do no harm if we understand what we have a right to mean by it. These premiums, agios, or whatever one wishes to call them, were not premiums in the sense in which gold is now "at a premium" in Russia and was "at a premium" in the United States during our war. They were not premiums in such a way as to mark the departure of one metal from the other at the mint-ratio, but were of an entirely different origin and nature.

These aberrations from the mint-ratio were the signs of such desire to secure standard money as must now and then in some fashion show itself under any system of money whatever; a desire which is revealed from time to time in every gold-using nation of the world.

"The following statement of the average prices of gold is taken from a return made by the Bank of England to the House of Commons [Aug. 18, 1842].

The ounce of gold—equal *in weight* to £3 17*s*, 10½*d*. of ideal coins—was *worth* in

	£	*s.*	*d.*		£	*s.*	*d.*		£	*s.*	*d.*
1827	3	17	6	1832	3	17	9¼	1837	3	17	9
1828	3	17	6¾	1833	3	17	9¼	1838	3	17	9¼
1829	3	17	9¼	1834	3	17	9	1839	3	17	11
1830	3	17	9¼	1835	3	17	9	1840	3	17	9¼
1831	3	17	10¼	1836	3	17	9½	1841	3	17	9

"Another statement from the same source [App. 8, Rep. Banks of Issue, 1840] gives four quotations of £3 18*s*. as the price for 1839. We have, then, the difference between £3 17*s*. 6*d*. and £3 18*s*.—that is to say, 6*d*. per oz., close to ⅝ per cent.—as the range of fluctuation in the price of gold as measured by the English Gold Standard." Since the Bank Act of 1844, making it the banker's duty to pay £3 17*s*. 9*d*. per oz. standard for bullion, the remaining 3 halfpence going to defray cost of coinage, the price of bullion *at the Bank* has not changed, though "at any other place the question of use in that place, or of transportation to another place" may give it a different value.[1]

"If gold in England, the home of the Gold Standard, moved within a range of ⅝ per cent. as measured in gold itself the wonder is that it remained in France, measured in silver, as near 15½ as it did; and the premium in Paris between 1820 and 1850 is thus transformed into an argument for silver and for laws that keep gold and silver in harness."[2]

Each year and sometimes twice and thrice within a year, London exchange in New York reaches the

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[1] Horton, *The Silver Pound*, pp. 60, 61.

[2] *Ibid*, p. 212.

"gold point." That is, a merchant in New York owing a sum in London payable in sterling (gold), that he may avoid the actual shipment of gold, is willing to give for exchange, in New York, a quantity of gold greater than is contained in the number of pounds sterling which are actually to be paid by him in London. One may, if one will, call this paying a "premium" on gold. If exchange stays at any time at gold point, gold is actually shipped, when the freight and insurance may be considered as another form of premium on gold. Again, the Bank of England pays in its way a premium on gold whenever that metal is thought to be too scarce in London. This premium takes the form of an elevated rate of discount. So, too, the Bank of France charges, under the very name of "*prime*," a premium for the withdrawal of gold from its vaults for the purpose of exportation. And lastly, in any locality in the world, be gold in general never so plenty there, a local and temporary scarcity of it may arise, in the midst of which, if any one wishes gold for any special purpose, he must give more than a dollar to get a dollar. Paying an agio on paper money over the very gold on which it is based is not infrequent.

In none of these cases, however, does the premium imply any derangement in the money system where it arises. In none of them does it signify what the premium on gold at present in Italy implies there. It does not mean that any part of the standard money has vanished out of the system, that the currency of the nation has gone over to a new basis. In his interpretation of the French gold agios of which he makes so much, Mr. Giffen, I am persuaded, is entirely in

error. In the sense which he attaches to the term, gold did not attain a "premium" in France after 1803.

Agios upon silver occurred as well as agios upon gold, often in the same months. Agios were not seldom realized upon gold during the very years when most gold came to the mint. That gold then tended to be scarce none doubt. That after 1820 less of it than of silver was in circulation is certain. But that it had left the circulation or "risen to a premium" in the sense of having swerved from its legal parity with silver is a mistake.

The fact is that an agio upon a precious metal in any land is no just criterion of its scarcity, still less a proof of its having ceased to circulate. When a precious metal bears an agio here or there in a bimetallic country, one cannot add this to the legal ratio and then truthfully declare as a general fact that the market price of the metal has risen above the legal price.

Mr. Giffen presumably would not argue against bimetallism so earnestly, had he not in mind some counter theory seeming to him superior to that urged by bimetallists. Minimize them as he may, he dare not and does not deny the evils which bimetallists bewail. What method does he suggest for dealing with these? Virtually this: Let gold prices, that of silver inclnded, find their level. The woe of the descent will soon end, when monetary affairs will be prosperous again. This expectation I consider wholly delusive.

Our author does not confuse low prices with a fall of prices as all American monometallists do. He sees clearly that the fall of prices is what in any case causes ruin, not the lowness of the prices after they have fal-

len. His teaching is that while during its progress a general fall of prices, however caused, is always unfortunate, and while the effects of such a fall may be grievous and continue long, yet that, when attained, a low range of prices, considered apart from all the causes which made it low and from the entire process by which it became low, is as desirable as a high range.

This theorem is so nearly true that if Mr. Giffen did nothing but maintain it in the abstract, not putting it forward as applicable to the world's present monetary case, few would argue with him. Could we foresee a speedy end to the prevalent fall of prices; could we look forward to a proximate time when a new level of prices would be reached, and all the vestiges of men's bloody journey thereto wiped out and forgotten, agitators for silver full money would be few. The question whether, when arrived at, the new range of prices would be the most steady one possible, would still be very important, but not many would think it vital. It might easily be shown that, strictly, low general prices are not so advantageous as high, since they presuppose a smaller volume of standard money, which must render the money unit more liable to fluctuations in value from increments and decrements in the total stock. Very low prices might also involve inconvenient and costly smallness in coins. Moreover, provided gold and silver money can be effectively shored together into a single volume, the unit of value in such a system would be less changeful than in a monometallic system even if the whole metal-money volume had the same bulk in both cases, since fluctuations in each of the

two metals at one and the same time are less probable than in one alone. I, however, waive consideration of these matters in order to touch some which are more weighty.

Mr. Giffen is mistaken in imagining that any drop in general prices can, as men do business now, be a short-lived evil. The fall in itself might indeed be temporary. A new plane of prices might be established in a few years or even months. But the train of bitter consequences would be long. It is estimated that a trillion and a half dollars' worth of time contracts are now outstanding, and that seventy per cent. of the world's commercial transactions are based right along, in some manner, upon deferred payments or credit. Such facts, far from rendering it unimportant whether the volume of standard money is large or small [range of prices high or low], make this a far more vital question than it would otherwise be. The slightest drop in average prices [increase in the value of money], however soon ended so far as indicated by prices having assumed a new level, would continue to entail disastrous effects till the last cent of the indebtedness outstanding when it occurred had been cancelled.

Mr. Giffen's deepest error, after all, consists in supposing that a new level of prices in the gold-using world is attainable soon or ever without the rehabilitation of silver as full money. I believe that his policy, could it prevail, would place the business of Europe and North America on an eternal down-grade of prices. What is now going on is not a simple halving of the money in one independent price-world. Were that the case, after the agony was over, the money supply com-

ing to have the same relation to money demand as before, monetary order and peace would be re-established. But in fact we are finding it impossible to sever the gold price-world from the price-world at large. The gold nations are not the old price-world of 1870 changed over. They are a new price-world partly yet very imperfectly carved out of the old. Prices in this embryo world do not depend alone upon the relation of gold to commodities in this new world itself. The gold prices of all commodities that enter into international trade, and, indirectly, to some extent, all gold prices, are powerfully affected, not to say positively determined by the silver prices of similar articles.

This is well explained by Mr. G. Jamieson in an article in the *Journal of the Royal Statistical Society*, London, for December, 1893. He writes:

"One would be disposed to say *a priori* that the larger market would rule, and that the gold price would remain steady, leaving the adjustment to be made on the other side. In that case the silver price in China [or India] must rise.

"But it does not appear to be so. It is, I believe, a well-known fact in the commercial world that it is much easier to lower prices than to raise them. If you can afford to go down a halfpenny, a bargain is much more easily struck than if you are bound to stand out for a rise of a halfpenny. It would seem then to be a general rule that adjustments following on a fall of exchange are always made along the line of least resistance, and that therefore it is not the China price that rises, but the London price that falls. Merchants operating on the usual principles find it easier to buy

Asiatic produce at the old prices and sell it in London at a concession, than to stand out for old prices at home in order to be able to pay more to the producer.

"From this point of view, it is really silver that rules the world; it is the purchasing power of the cheaper metal that determines the price all over. Just as in a bimetallic country, the cheaper metal will drive out the dearer toward her monometallic neighbors, so, as between countries of different standards, will the prices prevailing in the country of the cheaper metal drag down prices all over to their own level. And, reasoning forward from the experience of the past, it would not perhaps be too rash to conclude that the prices of commodities in Europe, so far as these can be drawn in any fair quantity from silver-using countries, must continue to decline with every further fall in silver."

With this man-of-business view accords exactly the conclusion to which Professor Shield Nicholson has arrived in a purely theoretical way.[1] He makes it extremely probable from *a priori* considerations that even when silver actually falls in value, as it probably did somewhat during 1893, and falls in consequence of some cause directly affecting itself only and not in the first instance reaching gold at all, the gold prices of international commodities are still determined by their silver prices.

This affords an interesting outlook. Were silver again standard money everywhere the demand for it would be so great that its marginal cost and so its value in the world's trade would not fall but probably

[1] *Economic Journal*, March, 1894, p. 59 *seq.*

rise, prices in silver falling to correspond; but if silver continues to be full money in the silver lands only, excluding India, the demand for it can all be met at such a marginal cost as will permit the gold price of silver to fall and prices in silver lands to rise, slowly, for an indefinite time if not forever. If Mr. Jamieson is right in believing "that the prices of commodities in Europe, so far as these can be drawn in any fair quantity from silver-using countries, must continue to decline with every further fall in silver," the anticipation harbored by Mr. Giffen that the fall of prices now upon us will speedily end and exchange-facilities between Europe and the East soon be restored to the perfection they had before 1873, is an illusion of the first magnitude. Indeed, that it is so could be shown independently of all considerations touching silver countries, by reviewing the statistical position of gold itself. The preciousness of this metal through military and other hoarding will drive more and more nations to paper money, whose depreciation, acting as a premium on exportation from these to gold countries, must depress in these latter the prices of international commodities and to some extent all prices. To this process absolutely no end can be foreseen if silver continues under ban. If gold alone abides as full money in the West, let us this once implicitly believe Mr. Giffen, "then we may have a long continued fall of prices from generation to generation, and this will probably have very great effects as time goes on."